my

# APPENDIX B.

# LIST OF NEW BRUNSWICK PLANTS.

BY JAMES FOWLER, M. A.

# PREFATORY NOTE.

The writer has long felt the want of a list of our Provincial Flora to serve as a guide for collecting Plants when visiting different localities, and also to furnish a reply to numerous correspondents in other countries. Having acquired the habit of collecting and preserving specimens of such plants as met his eye in his neighborhood, or during his visits to more distant places, he believes that he has secured a large majority of our local species, and that the publication of a List of these would be very useful, not only to the increasing number of Amateur Botanists within the Province, but also to Medical men and others interested in our native plants. The vegetation of a country is the product of its climate and soil. A list of its vegetable forms will consequently reveal to the Naturalist the character of the region to which they belong. There are also several interesting scientific questions which can only be solved by the use of the materials which are furnished by such lists.

The writer is not aware that any similar list has ever been published, at least nono such has ever met his eye. The reader will notice that where special localities are mentioned, they are nearly all comprised within a very limited portion of the Counties of York, St. John, Kent, and Restigouche, these being almost the only districts yet visited by any Botanist. The greater portion of the Mosses and Lichens have been collected in the immediate neighborhood of the writer's former home in Kent. The fact that so few Counties are represented in the List, indicates how much yet remains to be done before the true character of our Flora can be known and any reliable scientific deductions drawn from it.

The List is limited to species of which the writer has seen specimens with his own eyes. In the few cases in which species are mentioned of which he possesses no specimen, the names of the parties with whom they may be seen are given. His thanks are due to such friends as Mr. Matthew and Mr. Hay, of St. John, Mr. Chalmers, formerly of Campbellton, and others, for rare or local species.

JAMES FOWLER.

FS012-1478-578

# RANUNCULACE.E-Crowfoot Family.

- CLEMATIS Virginiana, L. Common Virgin's Bower. Thickets, River banks, &c. Common. The large clusters of fruit conspicuous in autumn and early winter. Fl. August.
- ANEMONE multifida, DC. Many-cleft Anemone. St. John River above Fredericton.
- Grand Falls, (Mr. Moser.) June. A. Virginiana, L. Virginian Anemone. Mouth of Upsalquitch. Grand Falls, St.
- John River, (Mr. Moser.) July.
  A. Pennsylvanian, L. A. dichotoma, L. Pennsylvanian Anemone. Along St. John River and tributaries. Tattagouche Falls. July—Aug. 4.
- A. nemorosa, L. Wind-flower. Wood Anemone. Rare in northern counties, more common southwards. A beautiful little vernal flower. Borders of woods. May— 5. June.
- HEPATICA triloba, Chaix. Round-lobed Hepatica. A specimen in University Herb. is labelled Keswick Ridge. I have not found it. Woods, in early Spring. 6.
- THALICTRUM dioicum, I. Early Meadow Rue. Keswick Ridge. (Prof. Bailey,) Rare.
- T. Cornuti, L. Tall Meadow Rue. Common along wet banks of brooks. Aug. 8.
- RANUNCULUS aquatilis, L., var. trichophyllus, Chaix. Common White Water-Crow-9. foot. Common in sluggish brooks. July.
- R. multifidus, Pursh. Yellow Water Crow-foot. In ditches at Point de Bute and 10. Belle Dune. Rare. June-July.
- R. Flammula, L., var. reptans, Gray. Creeping Spearwort. Sandy shores and inun-11.
- dated banks. Rather rare. July—Aug. R. Cymbalaria, Pursh. Sea-side Crowfoot. Spreading by long runners over sandy 12. shores near brackish or salt water. June-Aug.
- 13.
- R. abortivus, L. Small-flowered Crowfoot. Common. May—June. R. sceleratus, L. Cursed Crowfoot. "Juice acrid and blistering." Shediac. River Charlo. Rare. July. Ditches. 14.
- 15. R. recurvatus, Poir. Hooked Crowfoot. Along a small shaded brook at Bass River, Kent Co. Prob. not rare. June.
- 16. R. Pennsylvanicus, L. Bristly Crowfoot.. Wet places, Rather rare.
- R. repens, L. Creeping Crowfoot. Abundant in damp or shady places. May-Aug. 17. R. ACRIS, L. Buttercups. Tall Crowfoot. Too abundant in damp fields. The very 18.
- acrid juice is dissipated by drying when the plants are cut with the hay. When green they are avoided by cattle. June-Aug.
- 19. Caltha palustris, L. Marsh Marigold. Common in wet swampy places. May. Conspicuous by its large yellow flowers and round kidney-shaped leaves.
- COPTIS trifolia, Salisb. Goldthread. Its long, bitter, vellow roots are sometimes used 20. in medicine. Common. May-June.
- AQUILEGIA VULGARIS, L. Garden Columbine. Escaped from gardens near St. John. 21. 22. ACTEA spicata, L., var. rubra, Michx. Red Baneberry. Common. Richwoods. June.
- 23. A. alba, Bigel. White Baneberry. Rich woods. Rather rare. June.

# BERBERIDACEÆ—Barberry Family.

24. Berberis vulgaris, L. Barberry. Occasionally found near garden fences.

# NYMPHÆACEÆ—Water-Lily Family.

- NYMPHEA odorata, Ait. White Water-Lily. Ponds and Lakes. I have only seen it 25. in St. John Co. July-Aug.
- NUPHAR advena, Ait. Common Yellow Pond-Lily. In stagnant water. Rather 26. scarce.
- N. luteum, Smith, var. pumilum, Grav. Small yellow Pond-Lily. In water. Wood-27. stock.

### SARRACENIACE, E-Pitcher-Plants.

SARRACENIA purpurea, I., Side-saddle Flower. Pitcher-Plant. Huntsman's Cup. 28. Common in bogs. Aug.

# PAPAVERACEÆ—Poppy Family.

- 29.
- PAPAVER SOMNIFERUM, L. Common Poppy. Spontaneous in gardens. Sanguinaria Canadensis, L. Blood-root. York Co. (Prof. Bailey.) 30.
- 31. CHELIDONIUM MAJUS, L. Celandine. A garden weed in Fredericton.

# FUMARIACE E-Fumitory Family.

32. DICENTRA Cucullaria, DC. Dutchman's Breeches. A very delicate little plant appearing in early spring in rich woods. Rather rare. 33.

CORYDALIS glanca, Pursh. Pale Corydalis. Rocky places; rather common. June

-Aug. 34. Fundaria officinalis. L. Funitory. Escaped from ballast in a few places. Buctouche.

St. John, &c.

CRUCIFER E-Mustard Family.

NASTURBIUM palustre, DC. Marsh Cress. In water and wet places. Common along the St. John River and its tributaries. July-Sept.

36. 37.

38.

39.

the St. John River and its tributaries. July—Sept.

Dentaria diphylla, L. Pepper-root. Toothwort. Kent. Fredericton.

Cardamine hirsuta, L. Small Bitter Cress. Wet places. Common.

Arabis hirsuta, Scop. Rock Cress. Eel River, Restigouche. On Rocks, Portland.

A Drummondii, Gray. Eel River, Restigouche. Sandy places. Aug.

Barbarea vulgaris, R. Brown. Winter Cress. Yellow Rocket. A weed. Richibucto.

Erysimum orientale, R. Brown. Ballast heaps, Richibucto. Apparently naturalized.

Sisymbrium officinale, Scop. Hedge Mustard. An unsightly weed abundant in Fredericton. June—Sept.

Brassica Sinapistrum, Boiss. Sinapis arvensis. L. Charlock. Very abundant in many places. Bare in northern counties. 40. 41. 42.

43. many places. Rare in northern counties.
B. Alba, Gray. Sinapis alba. L. White Mustard. Escaped from gardens in a few places.

44. 45. B. nigra, Gray. Sinapis nigra, L. Bluck Mustard. Rare, near dwellings and on ballast.

46.

CAMELINA SATIVA, Crantz. False Flax. Among flax. Rare. CAPSELLA BURSA-PASTORIS, Monch. Shepherd's Purse. Common weed. 47. LEPIDIUM RUDERALE, L. Peppergrass. Spreading from ballast heaps. Senebiera didyma, Pers. Wart-Cress. Spreading from ballast at St. John. 48 49.

S. Coronopus, DC. Swine Cress. Spreading from ballast at St. John. Carile Americana, Nutt. American Sea-Rocket. Common on sea-shore. Aug. 50.

51. RAPHANUS RHAPHANISTRUM, I., Wild Radish, Jointed Charlock, A troublesome weed 52. at Fredericton and a few other places.

# VIOLACEÆ-Violet Family.

53. VIOLA lanceolata, L. Lance-leaved Violet. On shore at Rothsay.

54.

V. blanda, Willd. Sweet White Violet. Damp places. Common. May. V. cucullata, Ait. Common Blue Violet. Abundant everywhere. W 55. Common Blue Violet. Abundant everywhere. White flowers v. pubescens, Ait.

56. Downy Yellow Violet. Woods. Rather scarce.

57. V. tricolor, L. Pansy. Heart's Ease. Spontaneous in gardens.

# CISTACEÆ-Rock-rose Family.

HUDSONIA tomentosa, Nutt. Abundant on Kouchibouguac Beach. **5**8.

LECHEA minor, Lam. Pinweed. Kouchibouguac Beach. 59.

# DIOSERACE E-Sundew Family.

60. Drosera rotundifolia, L. Round-leaved Sundew. Damp places and bogs. Common July-Aug.

61. D. longifolia, L. Long-leaved Sundew. Bogs and borders of lakes. Common. July -Aug.

# HYPERICACE Æ-St. John's-wort Family.

62. HYPERICUM PERFORATUM, L. Common St. John's wort. Fields, etc. A worthless weed with very acrid juice; difficult to eradicate. Petals and anthers with black dots.

63.

64.

65.

Leaves with transparent dots. July—Aug.

H. ellipticum, Hook. Common in wet places. July.

H. mutilum, L. Wet places. Very common.

H. Canadense, L. Common in wet, sandy soil. July—Sept.

ELODES Virginica, Nutt. Marsh St. John's-wort. Common on wet banks of streams and in swams. July 66. and in swamps. July.

CARYOPHYLLACE.E-Pink Family.

67. SAPONARIA OFFICINALIS, L. Soapwort. Bouncing Bet. Queensbury Parsonage. Prof. Bailev.

- SILENE INFLATA, Smith. Bladder Campion. Miramichi, Richibucto. Rather rare. 68.
- S. Armeria, L. Sweet-William Catchfly. Occasionally spontaneous in gardens. 69.
- 70. S. NETHLORA, L. Night-flowering Catchflower. A rare weed in cultivated grounds. 71. LYCHNIS GITHAGO, Lam. Corn Cockle, A weed in wheat fields conspicuous by its purple-red flowers.
- 72. ARENARIA lateriflora, L. Common in gravelly soil and on shore. June.

- A. peploides, L. On sandy shore at Shediac. Rare. STELLARIA MEDIA, Smith. Common Ckickweed. Abundant. 74.
- 75. S. longifolia, Muhl. Long-leaved Stitchwort. In grassy places. Rather scarce. June-July.

76. S. longipes, Goldie. A reduced form on sand beach at Belledune.

77. S. uliginosa, Murr. Swamp Stitchwort. Rather common in swamps and rills. 78.

79.

S. borealis, Bigelow. Northern Stitchwort. Rather rare. In shaded places.
S. humifusa, Rottboell. Harvey, York Co. Rare.
Cerastium viscosum, L. Mouse-ear Chickweed. In fields. Common.
C. arvense, L. Field Chickweed. Dry places. Restigouche. Rare.
Sagina procumbens, L. Pearlwort. Damp rocks and springy places. 80. 81. 82.

S. nodosa, Fenz. Sent from Restigouche by Mr. Chalmers. 83.

54. SPERGULARIA rubra, Presl., var. campestris, Gray. Sand Spurry. Sandy soil. Abundant in Fredericton.

85.

S. salina, Presl. Sand on sea shore.
S. media, Presl. Salt marshes and sands. 86.

87. SPERGULA ARVENSIS, L. Corn Spurrey. A pestilent weed in damp soil.

# PORTULACACE E- Purslane Family.

88. CLAYTONIA Caroliniana, Michx. Spring Beauty. Not common. A pretty little plant springing from a small, deep tuber with a pair of opposite leaves and a looseraceme of delicate flowers. In early spring.

# MALVACE E-Mallow Family.

89. MALVA ROTUNDIFOLIA, L. Common Mallow. Rather rare.

M. SYLVESTRIS, L. High Mallow. Escaped from gardens in few places. 90.

M. CRISPA, L. Curled Mallow. Sometimes found near dwellings. 91.

M. MOSCHATA, L. Musk Mallow. Spontaneous in gardens. 92.

HIBISCUS TRIONUM, L. Bladder Ketima. A rare garden weed. 93.

# TILIACEE-Linden Family.

94. TILIA Americana, L. Bass Wood. Lime Tree. I have only seen it at Woodstook, but it is found along the St. John.

T. EUROPÆA, L. The European Linden is extensively planted about Fredericton as

95. an ornamental tree.

#### GERANIACEAE-Geranium Family.

- GERANIUM PRATENSE, I. Meadow Cranesbill. Escaped from cultivation near St. John. 96.
- G. Carolinianum, L. Carolina Cranesbill. Barren soil. Rather common. June-July. 97.

98.

G. Robertianum, L. Herb Robert. Quaco Cliffs. (University Herb.)
IMPATIENS fulva, Nutt. Spotted Touch-me-not. Shady wet places. Common. July— 99. August.

100. Oxalis Acetosella, L. Common Wood Sorrel. Cold shady woods. Common. June.

101. O. stricta, L. Yellow Wood Sorrel. Fields and thickets. Common.

# ANACARDIACE.E-Cashew Family.

102. Rhus typhina, L. Staghorn Sumach. A shrub or small tree 8-15 feet high; wood orange colored. Common in rocky and barren grounds; also planted for ornament.

R. Toxicodendron, L. Poison Ly. Poison Oak. Thickets, low grounds. Rather 103. common. June.

#### VITACEÆ.

- 104. VITIS riparia, Michx. Wild Grapes. Banks of St. John, near Fredericton; also planted for ornament. June.
- 105. Ampelorsts quinquefolia, Mich. Virginian Creeper. A woody vine extensively cultivated. Climbing up walls by its disk-bearing tendrils and rootlets.

# RHAMNACEÆ-Buckthorn Family.

106. RHAMNUS alnifolius, L'Her. In swamps. Mouth of Eel River, Restigouche. Near Green Head, St. John. Rare.

# SAPINDACE E-Soapberry Family.

- ESCULUS HIPPOCASTANUM, L. Common Horse Chestnut, Planted. 107.
- ACER Pennsylvanicum, L. Striped Maple. Rich woods; common. 108.
- 109.
- A. spicatum, Lam. Mountain Maple. Damp woods; common.
  A. saccharinum, Wang. Sugar Maple. Rock Maple. One of our finest trees, grow-110. ing in rich soil. May-June.
- A. dasycarpum, Ehrhart. White Maple. Silver Maple. The only wild specimens I 111. have seen are at Harris Cove on the Kennebeccasis. A few trees are planted in Fredericton, and have a fine appearance.
- A. rubrum, L. Red Maple. Swamp Maple. Called White Maple in northern coun-112. ties. Very common in swampy or damp woods. The red flowers very conspicuous in early spring. The leaves turning bright crimson in autumn.

# POLYGALACE E-Milkwort Family.

113. POLYGALA pancifolia, Willd. Fringed Polygala. A specimen in Prof. Bailey's Herb. is labelled, "Rushiagonish, Capt. Moody." I have not seen the living plant.

# LEGUMINOSÆ-Pulse Family.

- TRIFOLIUM ARVENSE, L. Rabbit-foot or Stone Clover. Richibucto. Along the Railway 114. track near St. John, Rare.
- T. PRATENSE, L. Rad Clover. Extensively cultivated. T. repens, L. White Clover. Everywhere. 115.
- 116.
- T. agrarium, L. Yellow or Hop Clover, (Queensbur . Frof. Bailey.) 117.
- T. procumbens, L. Low Hop-Clover. A few plants in saidy ground near Richibucto. 118.
- T. resupinatum, L. with 119.
- T. ornithopodioides, L. and a few other foreign species occur on ballast heaps at St. 120. John.
- MELLIOTUS OFFICINALIS, Willd. Yellow Melilot. Sweet Clover. Not common. M. ALBA, Lam. White Melilot White Sweet Clover. In a few places. M. LUPULINA, L. Black Medick. Nonesuch. Naturalized in several places. M. DENTICULATA, Willd. Introduced at St. John. 121.
- 122.
- 123.
- 124.
- 125. ROBINIA PSEUDACACIA, I. Common Locust or False Acacia. Cultivated for an ornamental tree. June.
- 126. R. VISCOSA. Vent. Clammy Locust. Cult. like preceding. June.
- ASTRAGALUS alpinus, L. Nepisiquit River. Upper St. John. 127.
- 128.
- OXYTROPIS campestris, DC. Islands of St. John River. Prof. Bailey.
  HEDYSARUM boreale, nutt. Grand Falls. Specimen received from Mr. Moser.
  DESMODIUM Canadense, DC. Fredericton, and Upper St. John. 129.
- 130.
- 131. Lotus corniculatus, L. Apparently naturalized at Fairville. VICIA SATIVA, I. Common Vetch or Tare And var. angustifolia, Gray. Occasionally 132.
- found in fields or on roadsides. 133.
- V. HIRSUTA, Koch. Along the Railway near St. John. V. Cracca, L. Fields and waste places. Not common. 134.
- 135. LATHYRUS maritimus, Bigelow. Beach Pea. Sea coast. Rather common.
- 136. L. palustris, L., var. myrtifolius, Gray. Common.
- 137. AMPHICARPHA monoica, Nutt. Hog Pea-nut. St. John River.

### ROSACEÆ-Rose Family.

- PRINUS pumila, L. Dwarf Cherry. St. John River, Mr. Hay. Restigeuche River. 138. University Herb.
- P. Pennsylvanica, L. 139. Wild Red Cherry. Very common. June.
- 140.
- P. Virginiana, L. Choke-Cherry. Banks of streams. Common. June. P. serotina, Ehrhart. Wild Black Cherry. Rare. "Fruit slightly bitter, but with a 141.
- pleasant vinous flavor." (†ray. Oxbow, Salmon River.
  Spirea salicifolia, L. Common Meadow-Sweet. Swampy or wet grounds. Common. 142.
- 143. S. tomentosa, L. Hardhack. Steeple Bush. Distinguished by the rose-colored flowers and the woolly under-surface of the leaves. Rather scarce. July.

144. AGRIMONIA Eupatoria, L. Common Agrimony. Borders of woods. Common. July-

145. GEUM album, Gmelin. Woodstock. Rare, June-Aug.

146.

147.

-

G. macrophyllum, Wild. Kent. St. John. Not common. June. G. strictum, Ait. Fredericton. July. G. rivale, L. Water, or Purple Avens. Boggy and wet places. Common. June. 148

POTENTILLA Norvegica, L. A coarse weed in fields. Common. 149.

P. Canadensis, L var. simplex. Torr. and Gr. Common Cinque-foil or Five-Finger. 150. Fields. Common. June-Aug.

151. P. argentea; L. Silvery Cinque-foil Norton, Mr. Hav.

252. P. Anserina, L. Silver-Weed, Brackish murshes, River banks, &c. Rather common. July-Aug.

153. P. fruticosa, L. Shrubby Cinque foil. Wet shores Kennebecasis. July-Aug.

P. tridentata, Ait. Three toothed Cinque foil. A small plant covering the rocks at Carleton Heights. July.
P. palustris, Scop. Marsh Five-Finger. In boggy places. Distinguished by its pur-154. 155.

ple flowers and creeping stems. June-Aug.

Fragaria Virgianiana, Enri urt. Common Strawberry. Everywhere. F. vesca, L. Alpine Strawberry. Dry and rocky places. Rare. 156.

157.

158. DALIBARDA repens, L. In dry mossy woods. June.

RUBUS Chamæmorus, L. Cloud berry. Peat bogs. Fruit rather rare. 159.

160. R. tritlorus, Richardson. Dwarf Raspberry. Wooded hillsides. Common. June.

161. R. strigosus, Michx. Red Raspberry, Abundant in burnt waste land everywhere. June-July. Fruit ripening for several weeks.

 R villosus, Ait. Common or High Bluckberry.
 ders of thickets, or beside fences. Common.
 R. Canadensis, L. Low Blackberry, Dewberry.
 A very variable plant, found in borders of thickets, or beside fences.
 Rocky places and thickets. 162.

163. mon. May.

164.

R. hispidus, L. Running Swamp-Blackberry. Rather rare. Rosa Carolina, L. Swamp Rose. Damp grounds and brooks. This rose is spreading 165. rapidly in Europe. June—Aug.
R. lucida, Ehrhart. Dwarf Wild Rose. Borders of Swamps. Its stems and branches

166. are densely armed with bristly prickles. Common. June. R. RUBIGINOSA, L. Sweet Briar. Common in gardens and about dwellings. July.

167.

CRATÆGUS OXYACANTHA, L. English Hawthorn Frequently planted for hedges and 168. beside fences. June.

C. tomentosa, L. Bluck or Pear Thorn. Banks of streams. Ruther common. June. 169. 170. Pyrus arbutitolia, L. Choke-berry. Our form seems to be the var. melano-carpa.

Grav. Common in woods. June.

P. Americana, D.C. American Mountain Ash. Rowan Tree. Common in woods 171. and often planted for the sake of its ornamental clusters of bright-red berries. June.

AMELANCHIER Canadensis, Torr. and Gray. Shad bush. Service berry. Indian Pear. 172. A shrub or small tree producing a profusion of white blossoms in early spring, and welcomed as a harbinger of summer. Very common in open woods.

Var. Botryapium, Gray. The largest and most common form. May. Var. oblongifolia, Gray. With the branchlets and young leaflets covered with white down; is smaller and rather rare.

Var. oligocarpa, Gray. With 2-4-flowered racemes and thin smooth, oblong leaves

is only found in swamps. 2.4 feet high: fruit small. Common. May.

# SAXIFRAGACEÆ-Saxifrage Family.

RIBES Cynosbati, L. Wild Gooseberry. The large berries are covered with long 173. prickles. My specimen was collected by Rev. J. P. Sheraton, Black Lake, St. John. I have not seen the living plant. 174.

R. hirtellum, Michx. R. oxyacanthoides, L. Smooth Wild Gooseberry. In damp grounds. Common. May.

R. lacustre, Poir. Swamp Gooseberry. Known by its very prickly stems, and black, 175. bristly, small, unpleasant fruit. Damp woods and swamps. June.

R. prostratum, L'Her. Felid Currant. The pale red fruit glandular bristly, and when 176. bruised exhaling a disagreeable odor, as do also the leaves and young stems. Cold woods and rocks. Common. May. 177.

R. fluidum, L. Wild Black Currant. The black smooth berries very much resemble the Black Current of the gardens in flavor and o lor. Woods. Common.

R. rubrum, L. Red Currant. Apparently the same as the Red Currant of the 178.

gardens. Berries red, smooth. Damp woods. Not common. May-June.

179. R. aureum, Pursh, Flowering Currant, is extensively cultivated for ornament, its

long yellow blossoms and pleasant fragrance rendering it a favorite in early spring. Parnassia Caroliniana, Mich. Grass of Parnassus. A perennial smooth little herb 180. with a single or sometimes two clasping leaves low down on the stem, the others all radical. A solitary flower terminates the stem. York County.—Prof. Bailey. Have not seen the living plant.

SANIFRAGA Aizoon, Jacq. On moist rocks opposite Rothsay. (Herb of Prof. Bailey.)
Have not seen the living plant. 181.

S. Virginiensis, Michx. Early Saxifrage. York County.—(Herb of Prof Bailey.) 182.

MITELLA nuda, L. Mitre-wort. Bishop's-Cap. A delicate little plant with fine slender pinnatifid petals, greenish blossoms and round or kidney-shaped crenate leaves, 183.

found in deep mossy woods. Common. May—June.

Tiarella cordifolia, L. False Mitre-wort. One of our early flowers in rich rocky woods, 6-10 inches high, with a naked scape terminated by a simple raceme of white 184.

flowers. Rare in northern counties; common about Fredericton.

CHRYSOSPLENIUM Americanum, Schwein. Golden Saxifrage. A tender, smooth, low 185. plant with inconspicuous flowers, growing about springs and in cold wet places. Common. May.

# CRASSULACE E-Orpine Family.

186. Penthorum sedoides, L. Ditch Stone crop. I am indebted for a specimen to Mr. Hay, who collected it at Norton. A specimen in the University Herbarium is labelled "Fredericton." Wet open places and ditches. July—Sept.

Sedum Telephium, L. Garden Orpine or Live for-ever. Escaped from gardens and 187.

becoming a troublesome weed in some places.

188. S. Rhodiola, DC. Roseroot. On exposed sea-cliffs, St. John County. June.

### HAMAMELACE/E-Witch-Hazel Family.

HAMAMELIS Virginiana, L. Witch-Hazel. As it differs from other trees by blossoming 189. in October when the leaves are falling, and by retaining its flowers through the greater part of winter, it has come to figure largely in the superstitions of the ignorant and designing, and furnishes material for divining rods, etc. Damo rich woods. Rather rare.

# HALORAGEÆ-Water-Milfoil Family.

190. Myriophyllum spicatum, L. In deep water. Kouchibouguac. Kennebeccasis. Per-

191. M. tenellum, Bigelow. A very insignificant, simple, leafless plant 2.5 inches high, growing in water round the edge of lakes or ponds. Have only seen it near Richi-

192. HIPPURIS vulgaris, L. Mare's Tail. In water and deep mud. In the city of St. John, near the shipvard. Shediac. Dorchester. Rare.

# ONAGRACEÆ-Evening-Primrose Family.

193.

CIRC.ÆA alpina, L. Enchanter's Nightshade. Common in damp woods. July.
C. Lutetiana, L. Have no native specimen; one in Prof. Bailey's Herb. is labelled "Queensbury." 194.

195. EPILOBIUM angustifolium, L. E. spicatum, Lam. Great Willow-herb. Abundant on newly cleared land. The long spikes of pink-purple flowers very conspicuous.

196. E. palustre, L, var. lineare, Gray. In wet boggy places. Rather common.

197.

E. coloratum, Muhl. Somewhat common in wet places. July—August. Exormera biennis, L. Ecening Primrose. Common in fields and waste places. 198. Flowers very conspicuous in the evening twilight. June-September.

199. E. pumila, L. Very frequent in dry fields and roadsides. June.

#### UMBELLIFER E-Parsley Family.

200. Hydrocotyle Americana, L. Water Pennywort. In shady damp or springy places. Common.

Sanicula Marilandica, L. Sanicle. Black Snakeroot. Bass River, Kent Co. Wool-201.

stock. Rare or overlooked. Woods and copses. July.

Heracleum lanatum, Michx Cow Parsnip. In rich moist ground. A large, strong-scented weed, easily known by its broad flat umbels of white flowers and fruit. 202. Stems woolly and grooved. Common. June.

203. PASTINACA SATIVA, L. Common Parsnip. This plant spreads from gardens into waste

places.

204. Archangelica atropurpurea, Hoffm. Great Angelica. A stout smooth plant with hollow, dark purple stem, growing on low river banks. Bartibog, in Northumberland Co. Mr. Matthew reports it at Harris Cove, on the Kennebecasis.

205. A. Gmelini, DC. On the bank of Courtenay Bay near the Penitentiary.

206. CONIOSELINUM Canadense, Torr. and Gr. Hemlock Parsley. Wet borders of streams. Not very common. August. 207. AETHUSA Cynapium, L. Fool's Parsley. Have no native specimen, but there is one

in the University Herbarium from Kingsclear.

208.

209.

LIGUSTICUM Scoticum, L. Scotch Lovage. Near salt water on banks and rocks. Aug. Thaspum aureum, Nutt. Meadow Parsnip. Along St. John River. June. Cicuta maculata, L. Spotted Cowbane. Musquash Root. Beaver-Poison. Abundant 210. in wet or swampy fields. The root is a deadly poison. Aug. 210½. C. bulbifera, L. Bulb-bearing Water-Hemlock. Common in swamps.

SIUM lineare, Michx. Water-Parsnip. Wet, muddy places. Common. 211. 212.

CRYPTOTAENIA Canadensis, DC. Honewort. Rich woods. Woodstock.

Osmorrihiza longistylis, DC. Smoother Sweet Cicely. Rich woods. The large perennial roots are sweet aromatic. Plant 2-3 feet high. Woodstock. June. 213.

214. O. brevistylis, DC. Hairy Sweet Cicely. Rich woods. Rather common. Root not

so sweet as that of previous species. June.

215. CARUM CARUI, L. Common Caraway. Becoming a troublesome weed in neighborhood of St. John.

# ARALIACE E-Ginseng Family.

216. Aralia racemosa, L. Spikenard. A widely, irregularly branched plant, with large spicy-aromatic roots, found in rich, damp woods Flowers from July all summer-Berries and flowers found together on same plant. Not common.

A. hispida, Michx. Bristly Sarsaparilla. Wild Elder. Rocky barrens. Abundant in

Kent in dry burnt woods. June.

218. A. nudicaulis, L. Wild Sarsaparilla. Rich woodlands. Common. The long roots, which grow to the length of several feet, are sold in the market and employed in domestic medicine, instead of the officinal Sarsaparilla. Sometimes used in making beer.

219. A. trifolia, Gray. Dwarf Ginseng. Ground-nut. A little plant 4-7 inches high, springing from a globular tuber deep in the ground and pungent to the taste. Rich

woods. Kent County. May.

# CORNACE E - Dogwood Family.

220. Cornus Canadensis, L. Pigeon-Berry. Dwarf Cornel. Bunch-berry. Abundant. June.

C. circinata, L'Her. Round-leared Cornel or Dogwood. Weldford. Kent County. Probably not rare. In rich soil. June. 221.

C. sericea, L. Silky Cornel. Kinnikinnik. A shrub 3.8 feet high in wet grounds. 222. having the under side of the leaves silky-downy and producing bunches of pale. blue fruit. June.

223. C. stolonifera, michx. Red-Osier Dogwood. Known by its smooth bright red-purple branches and its flat cymes of white or lead-colored fruit. It spreads out into large

clumps by its prostrate or subterranean shoots. Wet grounds. June.

224. C. alternifolia, L. Alternate-leaved Cornel. A shrub or small tree 8-15 feet high, with the branches spreading out so as to form a flat top and bearing deep-blue berries on reddish stalks. In open woods. June.

#### CAPRIFOLIACE.E. Honeysuckle Family.

LINNEA borealis, Gronov. Linnaa. Twin-flower. "Dedicated to the immortal 225. Linnorus, who first pointed out its characters, and with whom this pretty little plant was a special favorite." Gray. A little evergreen creeping over dry mossy shaded grounds, sending up short stems which divide into two near the top, each division bearing a nodding fragrant flower. July. 226.

Lonicera ciliata, Muhl. Fly-Honeysuckle. Common in woods and one of our earliest

shrubs in flower. May.

227. L. carulea, L. Mountain Fly Honeysuckle. In bogs. Not common. June.

228. SYMPHORICARPUS racemosus, Michx. Snowberry. Common in gardens.

229. DIERVILLA trifida, Moench. Bush-Honeysuckle. Rocky places in fields. Common. July.

SAMBUCUS Canadensis, L. Common Elder. In rich soil in fields and beside fences. 230. Flowers late in summer; bears black fruit and has white pith. Clusters of flowers

S. pubens Michx. Red-berried Elder. Flowers in early Spring and ripens fruit be-231. fore the previous species blossoms. In rich soil. Berries red.

VIBURNUM nudnm. I. Withe-wood. Common in cold swamps. Our form is var. cas-232. sinoides, Gray. June.

V. Opulus, L. Cranberry-tree. Common on intervales. The fruit is collected as a 233. substitute for cranberries. A cutivated state of it is known under the name of Snow-ball Tree or Guelder-Rose.

V. lantanoides, Michx. Hobble-bush. American Wayfaring-tree. Very common in: 234. open woods among Maples. May.

# RUBIACEÆ-Madder Family.

GALIUM APARINE, L. Cleavers, Goose-Grass. Introduced in ballast at Carleton. 235.

236. G. Molli Go, L. On ballast at Richibucto.

287. G. asprellum, Michx. Rough Bedstraw. Low woods. Common.

238. G. trifidum, L. - Small Bedstraw. The var. pusillum, Gray, is abundant in sphagnous: swamps.

239. G. triflorum, Michx. Sweet-scented Bedstraw. Common in rich woods.

MITCHELLA repens, L. Partridge-berry. A small trailing evergreen in rich dry woods bearing red dry berries. Common. July. 240.

241. HOUSTONIA corrulea, L. Bluets. Very abundant in St. John Co. Have not noticed it farther north. In moist grassy places. On the sandy shore at Rothsay.

# COMPOSITÆ-Composite Family.

242. EUPATORIUM purpureum, L. Joe Pye Weed. Trumpet-Weed. Common on intervales. A stout herb with whorled leaves and flesh-colored flowers. 2-8 feet high.

243. E. perfoliatum, L. Thoroughwort. Boneset. Common in wet grounds.

- 244. E. ageratoides, L. White Snake-root. In rich soil on the banks of the Restigouche. 245. NARDOSMIA palmata, Hook. Sweet Coltsfoot. Rather common on the Richibucto-
- river in damp recently burned ground. May-June. 946

Tussilago Farfara, L. Coltsfoot. Spreading from ballast in several places.

Aster macrophyllus, L. Aster. Starwort. Woods and borders of fields. Aug. 247.

A. Radula, Ait. Wet boggy places. Aug.
A. cordifolius, L. Very common in woodlands. 248. 249. A. miser, L. 250.

A. miser, L. In thickets and fields. Abundant. A. simplex, Willd. On moist banks. Not comm 251. Not common. 252.

A. sestivus, Ait. On the shore below Richibucto. 253. A. longifolius, Lam. Damp places along streams. Richibucto. Carleton.

254.A. puniceus, L. Very common in swamps and along brooks. Var. vimineus, Gray. Carleton, in wet grounds. 255.

A. acuminatus, Michx. In cool, rich woods. Common.

256. A. nemoralis, Ait. Bogs. Have received specimens from Rev. J. P. Sheraton, and Mr. Hay of St. John.

257. A. graminifolius, Pursh. Mouth of Aroostook, Tattagouche Falls. Rare.

Exigeron Canadense, L. Horse-weed. Butter-weed. Very common. Now spread widely over the world. The writer has received specimens from Asia. July-Oct. 258. 259.

E. acre, L. On shore at Belledune, Restigouche.
E. Philadelphicum, L. Fleabane. Somewhat common in grass fields. 260. July-Aug. Rays very numerous and flesh-colored.

261. E. strigosum, Muhl. Daisy Fleabane. Fields. Common. July. 262. DIPLOPAPPUS linariifolius, Hook. Nepisiquit River. Rather rare.

263. D. umbellatus, Torr and Gray. Double-bristled Aster. Along fences and borders of woods. Common. Aug.

264. Solidago squarrosa, Muhl. Golden-rod. Kouchibouguac, on a rocky bank. Mr. Matthew reported it from Harris Cove.

265. S. bicolor, L. Abundant on the Richibucto River in dry waste land.

266. S. latifolia, L. Damp rich soil in shaded places. Bass River, Kent County; Points LeNim, Restigouche.

267. S. puberula, Nutt. Dry, sandy soil. Common. 268.

S. stricta, Ait. Bogs and swamps. Commor. S. thyrsoidea, E. Meyer. Bass River, beside a densely shaded brook. 269. 270.

S. sempervirens, L. Salt marshes. Rather common. S. altissima, L. Borders of fields and roadsides. Abundant. 271.

272 S. Canadensis, L. Kent County. Abundant beside fences. S. serotina, Ait. Restigouche. Mr. Hay.

273.

274.

ill-scented. Buctouche.

- S. gigantea, Ait. St. John County.
  S. lanceolata, L. Abundant in old moist fields and along river banks. 275
- INULA HELENIUM, L. Common Elecampane. Roadside at Norton. Rare. 276
- 277. Ambrosia artemisicefolia, L. Roman Wormwood, Hog-weed, Bitter-weed, Waste places or fields. Rare.
- 278 Rudbeckia hirta, I.. Cone-flower. A rough looking weed with large yellow rays and a brown centre in grass fields. Introduced with grass seed from the West, and found occasionally in different places. Restigouche, Kent, York, &c.

279. HELIANTHUS ANNUUS, L. Common Sunflower. Common in gardens, but apparently not naturalized.

280. H. TUBEROSUS, L. The Jerusalem Artichoke is spontaneous about garden fences.

- 281. BIDENS frondosa, L. Common Beggar-ticks. A very common coarse weed growing about dwellings and easily known by its seeds sticking by their barbed awns to the clothes.
- 282. B. cernua, L. Smaller Bur-Marigold. Common in ditches and wet places. August. 283. MARUTA COTULA, D C. Common May-weed. Very common about roadsides near
- dwellings. An acrid strong scented herb. 284. ANTHEMIS ARVENSIS, L. Corn Chamomile. Resembles the above very much, but not

ACHILLEA Millefolium, L. Common Yarrow or Milfoil. Abundant.

- 285. 286. A. PTARMICA, L. Sneezeroot. Looks like a native at River Charlo, Restigouche; and at Kouchibouguac, Kent.
- 287. LEUCANTHEMUM VULGARE, Lam. Ox eye or White Daisy. White Weed. A very troublesome weed, covering whole fields with its fine large flowers. June-July.

- 2871. L. Parthenium, Godron, Feverfew. Gardens, scarcely wild.
  288. Tanacetum vulgare, L. Common Tunsy. Near dwellings and often the only memorial of the gardens of the old settlers.
  - T. HURONENSE, Nutt. Restigouche at mouth of Upsalquitch. Shore of St. John River at Fredericton.

290.

- ARTEMISIA VULGARIS, L. Common Mugwort. Waste grounds near houses.

  A. BIENNIS, Willd. Biennial Wormwood. Waste grounds in several localities. Kouchi-291. bouquac, Fairville, &c. apparently introduced and spreading rapidly.
- 292. A. ABSINTHIUM, L. Common Wormwood. Escaped from gardens to roadsides. touche. &c.

GNAPHALIUM decurrens, Ives. Everlasting. Green Head, St. John Co. Rare. 293.

G. polycephalum, Michx. Common Everlasting. I have not found this plant, but 294. there is a specimen in the University Herb. marked "abundant."

295.

G. uliginosum, L. Low Cudweed. Common on roadsides in damp soil.
G. SYLVATICUM, L. Abundant at Campbellton, Restigouche; also found in woods at 296. River Charlo. Apparently native, but perhaps introduced.

Antennaria margaritacea, R. Brown. Pearly Everlasting. Very abundant about dry

297. fields and along fences. Aug.

A. plantaginifolia, Hook. Plantain-leaved Everlasting. Sterile knolls and dry road-298 sides. May-June.

ERECHTHITES hieracifolia, Raf. Fireweed. Very common in recently burnt clearings. 299. July-Aug.

SENECIO JACOBAEUS, L. Common Ragwort. A coarse weed 2-3 feet high with stri-300. ated branched stem, large golden-yellow flowers. Spreading rapidly at Newcastle, Miramichi. At Pictou it has extended widely into the neighboring districts, and has, for many years, been a subject of county legislation.

S. VISCOSUS, L. Stinking Groundsel. May be known by its low much branched and 301. spreading stems covered with viscid hairs and yielding a fetid odor. Spreading at Bathurst, Shediac, &c.

S. VULGARIS, L. Common Groundsel. A weed in gardens and waste grounds. 302.

-Sept. S. aureus, L. Golden Ragwort. Squaw weed. A very variable plant. Abundant in 303.

many places along the St. John, both in swamps and dry intervales. June. ARNICA mollis, Hook. Arnica. Grand Falls of Nepisiquit. Rare.

304. Knapweed. Abundant in Restigouche and at Fredericton, in CENTAUREA NIGRA, L. 305. grass fields or roadsides. July.

CNICUS BENEDICTUS, L Blessed Thistle. Bass River. Escaped from gardens. Some-306. times cultivated under the name of Horehound, and used as such. Rare.

307. CIRSIUM LANCEOLATUM. Scop. Generally but wrongly called Scotch Thistle. common.

308. C. muticum, Michx. Swamp Thistle. Frequent in swamps and low places.

C. ARVENSE, Scop. Common Thistle. Too abundant everywhere. Flowers sometimes 309. white.

310. CARDUUS NUTANS, L. Musk Thistle. Spreading from ballast at Chatham.

311. ONOPORDON ACANTHIUM, L. Cotton or Scotch Thistle. Buctouche. Bass River. Rare. LAPPA OFFICINALIS, Allioni. Burdock. Around dwellings. The burs hold tenaciously to the dress or the coats of animals. Aug.

CICHORIUM INTYBUS, L. Succery or Cichory. Introduced in a very few places, but will 312.

313.

doubtless spread. Aug.-Sept.

LEONTODON AUTUMNALE. L. Fall Dandelion. Roadsides and fields. Rather rare. 314. July-Aug.

315-HIERACIUM Canadense, Michx. Canada Hawkweed. Rather rare.

316.

H. scabrum, Michx. Rough Hawkweed. Dry open woods and fields, Not rare. NABALUS albus, Hook. White Lettuce. Rattlesnake root. In rich woods. Common. 317.

318. N. aitissimus, Hook. Tall White Lettuce. Rich woods.

319. N. racemosus, Hook. Conspicuous by its long narrow interrupted spiked panicle of flesh-colored flowers. Mouth of Kennebeccasis in clefts of rocks. 320. TARAXACUM DENS-LEONIS, Desf. Common Dandelion. Abundant everywhere in spring

and early summer. Used for greens. Also the root for Coffee.

Lactuca Canadensis, L. Wild Lettuce. Rich woods and fields. Common. 321.

MULGEDIUM leucophæum, DC. False or Blue Lettuce. Low wet ground. Rather com-322. 323.

Southus asper, Vill. Spiny-leaved Sow-Thistle. An annual plant 1-3 feet high with pale yellow flowers growing in gardens and in rich soil around dwellings. The seeds are smooth and three-nerved on each side.

324. S. ARVENSIS, L. Field Sow-Thistle. A perennial plant with creeping rootstocks, light yellow flowers and having the seeds transversely wrinkled on the ribs. Garden weed.

CREPIS VIRENS, L. Grows on ballast at St. John.

# LOBELIACEÆ-Lobelia Family.

326. LOBELIA cardinals, L. Cardinal-Flower. Low grounds. I am indebted to Mr. Vroom of St. Andrews for specimens of this beautiful flower

327.

 L. inflata, L. Indian Tobacco. Very common in fields and roadsides.
 L. Kalmii, L. Shores of St. John and Restigouche river, on limestone rocks. 328.

329. I. Dortmann, L. Water Lobelia. Shallow borders of lakes and ponds. Rather rare.

# CAMPANULACE E-Campanula Family.

330. CAMPANULA rotundifolia, L. Harebell. A pretty little plant found abundantly on the St. John and rather sparingly near Bathurst. Also at Blackville, Miramichi, and probably many other places. Often on rocks.

# ERICACE.E-Heath Family.

GAYLUSSACIA dumoza, Torr. and Gray. Dwarf and Blackberry. In a peat bog near Richibucto.

332,

G. resinosa, Torr. and Gray. Black Huckleberry. Swamps and barrens. June. VVCCINIUM Oxycoccus, L. Small Cranberry. "Stems very slender, 4-9 inches long, leaves ovate, acute, with strongly revolute margins." Gray. Common in peat bogs. Often gathered in spring. June.

334. V. macrocarpon, Ait. Large American Cranberry. "Stems elongated, 1-3 feet long leaves oblong, obtuse, glancous underneath, less revolete margins." Gray. Peat

bogs and marshes. June.

V. Vitis-Idea, L. Cowberry. Very abundant along the rocky coast of the Bay of Fundy and rocky hills inland. Sold in the market under the name of Cranberries.

Very rare in the northern counties.

V. Pennsylvanicum, Lam. Dwarf Blueberry. Our most common blueberry. The leaves are smooth and shining on both sides, and the berry covered with a blue bloom which is easily rubbed off. One form of it, var. nigum Wood, has black berries without a bloom and are sweeter and more pleasant to the taste than the common form. June.

3361. V. Canadense, Kalm. Canada Blueberry. Less common than the preceding and known by its leaves being covered with down on both sides as well as its branchlets. When spruce swamps or barrens are burned over, they become in a couple of years

blueberry barrens.

V. corymbosum, L. Swamp-Blueberry. This species should be common in the Pro-337. vince, though I have not detected more than a single specimen of it. Weldford on the Richibucto River.

CHIOGENES hispidula, Terr, and Gray. Creeping Snowberry. Often called Maideuhair 338 Berry. Common in shady mossy woods, creeping and trailing over roots and old

bogs. Fl. May 28, 1867; May 29, 1868.
Erig. A. repens, L. Ground Laurel. Mayflower. A favorite flower in early spring; 339. abundant in many places in shady woods or sometimes in open places. I have noted the following dates of its appearance at Bass River, Kent: May 18, 1867; May 4, 1868; May 5, 1869: May 2, 1870.

GAULTHERIA procumbens, L. 340. Creeping Wintergreen. Tea-herry. Flowers in August.

and forms its fruit, which ripens in the following June. Common.

Cassandra calyculata, Don. Leather-Leaf. Abundant in wet bogs.

Andromeda polifolia, L. Andromeda. Common in cold bogs.

Kalmia augustifolia, L. Sheep Laurel. Lambkill. Abundant in dry barrens. 341.

342

343.

344. K. glanca, Ait. Pale Laurel. Sandy swamps. Common.

- BRIGDORA Canadensis, L. Rhodora. A low shurb with showy flowers, which appear before the leaves in early spring. Covering extensive tracts of swamp in the northern 345. counties. May.
- 346.
- LEDUM latifolium, Ait. Labrador Sea. Common in swamps and wet barrens. June. Pyrola rotundifolia, L. Wintergreen. Round-leaved Pyrola. Rich woods. Common. 347. Var. incarnata, Gray, occurs near Fredericton. - (Prof. Bailey.) Var. asarifolia, Gray, with round, kidney shaped leaves, is not rare.

348 P. elliptica, Nutt. Shin-leaf. Rich woods. Common.

349.

P. secunda, L. One-sided Pyrola. Rich wood. Common. Moneses uniflora, Gray. One-flowered Pyrola. Cool shady woods. Not common. June. 350. CHIMAPHILA umbellata, Nutt. Prince's Pine. Pipsissewa. Common in dry woods. 351.

June. 352. MONOTROPA uniflora, L. Indian Pipe. Corpse-Plant. A low, smooth, waxy, white plant, turning black in drying. Rich, shady woods. Rather rare.

### AQUIFOLIACEÆ-Holly Family.

ILEX verticillata, Gray. Black Alder. Winterberry. Not rare in swamps. Retaining 853. its berries after its leaves have fallen.

354. NEMOPANTHES Canadensis, DC. Mountain Holly. In cold, wet woods. Common.

#### PLANTAGINACE E-Plantain Family.

355. PLANTAGO MAJOR, L. Common Plantain. Everywhere around dwellings. June-Sept. P. maritims, L. Around the coast in salt marshes and in clefts of rocks. Perennial 356.

near St. John at least.

#### PLUMBAGINACE A:- Leadworth Family.

357. STATICE Limonium, L., var. Caroliniana, Gray. Common around the coast in salt marshes.

#### PRIMULACE E-Primrose Family.

PRIMULA farinosa, L. Bird's-eye Primrose, Shore of Kennebecasis. Mr. Chalmers sent 358. it from Restigouche. June-July.

359. TRIENTALIS Americana, Pursh. Starflower. A low plant, 6-9 inches high, bearing a whorl of about seven leaves and one or more slender pedicels with single flowers. Common in shady woods. May.

Lysimachia thyrsiflora, L. Tufted Loosestrife. Cold swamps. Rather rare. July.

360.

361. L. stricta, Ait. Very common in marshy places. July. Specimens with bulblets in the axils of the leaves are common.

362. L. ciliata, L. Low grounds and thickets. Common.

363.

GLAUN maritima, L. Sea Milkwort. Common round the coast. June. Samolus Valerandi, L. var. Americanus, Gray. Water Pimpernel. Brook Week. Muddy 364. shore of a small brook at Kouchibouguac. Only place I have noticed it. July.

#### LENTIBULACE E-Bladderwort Family.

- 365. UTRICULARIA vulgaris, L. Greater Biadderwort. Common in stagnant waters and slow streams.
- 366. U. clandestina, L. Shallow water of a small lake near Richibucto.

367. U. cornuta, Michx. Common in peat bogs.

#### OROBANCHACEÆ--Broom-rape Family.

368. EPIPHEGUS Virginiana, Barton. Beech Drops. Cancer Root. A parasitic plant on the roots of beech trees. Rather rare.

# SCROPHULARIACE &-Figwort Family.

369.

- VERBASCUM THAPSUS, L. Common Mullein. Fields and roadsides. LINARIA VULGARIS, Mill. Toud Flux. Butter-and-Eggs. Escaped from gardens in a few 370. places.
- CHELONE glabra, L. Turtle-head. Snake head. Common in wet places. Aug.—Sept. MIMULUS ringers, L. Monkey-flower. Wet places. Common. ILYSANTHES gratioloides, Benth. Fals: Pimpernel. A smooth, much branched, spread-371.

372.

373. ing little plant frequent in wet sandy or gravelly places subject to inundation.

- Vernonica Virginica, L. Culver's-root. Culver's Physic. Though this plant is native in Vermont I have never seen it here except in gardens. July—Ang. Valuable in medi-374. cine.
- V. Americana, Schweinitz. American Brooklime. Brooks and ditches. 375. Common. July-Aug.

376. V. scutellata, L. Marsh Speedwell. In wet places. Common. July.

- V. officinalis, L. Common Speedwell. Dry fields or hills. Norton. Apparently rare. 377. July.
- V. serpyllifolia, L. Thyme leaved Speedwell. A little plant 2-6 inches high; very common 378. along roadsides and often in wet places, flowering in early spring and continuing to blossom till July.
  V. peregrina, L. Neckweed. Purslane Speedwell. Have not noticed it except at Kouchi-

379. bouguasis in waste ground. May.

V. AGRESTIS, L. Field Speedwell. Introduced a few years ago into a garden at Richi-380. bucto and now spreading beyond. A specimen collected in Fredericton appears in the University Herbarium.

381. CASTELLEIA pallida, Kunth, var., septentrionalis, Gray. Painted Cup. Hills of Restigouche, Aug.

284.

.

Euchright. Very abundant on dry hills near Bathurst and St. 382. EUPHRASIA officinalis, L. John. Formerly in high repute for its medicinal properties, and hence its tame in Milton's "Paradise Lost." 383.

RHINANTHES Crista-galli, L. Common Yellow Rattle. Common near St. John. Miramichi on Bathurst road. Blacklands, Restigouche.

Wood Betony. Mr. Moser has col-

PEDICULARIS Canadensis, L. Common Lousewort.

lected it at Grand Falls. 385. MELAMPYRUM Americanum, Michx. Cow Wheat. Common in open woods. July-Aug.

#### VERBENACEÆ-Vervain Family.

Verbena hastata, L. Blue Vervain. Waste grounds. Not common. 386.

#### LABIATE-Mint Family.

- 387. TENCRIUM Canadense, L. American Germander. Wood Sage. Sand-beach, Kouchibouguac.
- 3874. MENTHA piperita, L. Peppermint. Sparingly escaped from gardens.

388.

M. SATIVA, L. Whorled-mint. Escaped from gardens. M. arvensis, L. Corn Mint. Field at Norton. 389.

390. M. Canadensis, L. Wild Mint. Common in damp, shady places. Var. glabrata, Beuth. Rather rare. St. John. Restigouche. Lycorus Virginicus, L. Bugle-weed. Kent. 391.

392. L. sinuatus, Ell. Common in wet grounds.

CALAMINTHA Clinopodium. Beuth. Basil. Open woods on hillsides in Restigouche. 393.

394. HEDEOMA pulegioides, Pers. American Pennyroyal. In a waste field at Green Head, St. John.

395.

- NEPETA CATARIA, L. Catnip. A rare scape from gardens. N. GLECHOMA, Beuth. Ground Ivy Gill. About dwellings. 396. Abundant on roadsides between Shediac and Shemogue.
- 397. Brunella vulgaris, L. Common Self-heat or Heal-all. Fields and woods. Common. June-Sept.

398. Scutellaria galericulata, L. Scullead. Common in wet, shady places. S. lateriflora, L. Wet, shaded places. Common.

399.

- 400. GALEOPSIS TETRAHIT, L. Common Hemp Nettle. A very common and troublesome weed. Aug.
- 401. STACHYS aspera, Michx. A small patch near Napan Bridge, Northumberland Connty, among grass.
- 402. LEONURUS CARDIACA, L. Common Motherwort. Common in waste places around dwellings.

#### BORRAGINACE.E-Borage Family.

403. LYCOPSIS ARVENSIS, L. Small Bugloss. Sand beach, Eel River, Restigouche.

404. SYMPHYTUM OFFICINALE, L. Common Comfrey. Apparently naturalized in St. John Cemetery.

- 405. LITHOSPERMUM OFFICINALE, L. Common Gromwell. Roadside near Campbellton, Restigouche.
- 406. MERTENSIA maritima, Don. Sea Lungwort. Sand beaches along the coast. Scarce.
- Myosotis laxa, Lehm. Forget-me-not. In wet ditches at Point Le Nim. Restigouche Co. 407.

M. arvensis, Hoffm. Spreading from a garden at Bass River, Kent Co. 408.

409. ECHNOSPERMUM LAPPULA, Lehm. Stickseed. Sand beach at Eel River, Restigouche Co.

#### POLEMONEACE E-Polemonium Family.

COLLOMIA linearis, Nutt. As this plant is a native of the region between Lake Winnipeg 410. and the Pacific, it seems strange to find it growing at Fel River, Restigouche Co., on the sands often covered by the tides. Also on the high rocky hill towards Dalhousie.

#### CONVOLVULACE A Convolvulus Family.

411.

412.

Convolvulus arvensis, L. *Bindweed*. Fields. Rather rare. Calystegia sepium, R. Br. *Hedge Bindweed*. Rather common near the coast. Cuscura Gronovie, Willd. *Dodder*. Twining round grass and other herbaceous plants. 413. Month of Kennebecasis.

### SOLANACE E-Nightshade Family.

414. BOLANUM DULCAMARA, L. Bittersweet. Near dwellings. Not common.

S. NIGRUM, L. Common Nightshade. Near dwellings. Rare. 415.

416. HYOSCYAMUS NIGER, L. Black Henbane. Not common.

### GENTIANACE E-Gentian Family.

417. HALENIA deflexa, Grisebach. Spurred Gentian. Damp woods and barrens. St. Jonn Co.

418. GENTIANA Amarella, L., var., acuta, Hook f. Sent from Restigouche by Mr. Chalmers. G. linearis, Froel. Near Welford Station, Kent Co.

419.

420. MENYANTHES trifoliata, L. Buckbean. Common in bogs.

### APOCYNACE E-Dogbane Family.

421. Apocynum androsemifolium, L. Spreading Dogbane. Very common.

422. A. cannabinum, L. Indian Hemp. Pabineau Falls.

#### ASCLEPIADACEÆ-Milkweed Family.

423. ASCLEPIAS CORNUTI, Decaisne. Common Milkweed or Silkweed. Fredericton.

424. A incarnata, L. Swamp Milkweed. Keswick Valley. Prof. Railey.

#### OLEACEÆ-Olive Family.

425. FRAXINUS Americana, L. White Ash. Moist rich woods.

426. F. sambucitolia, Lam. Black Ash, Water Ash Swamps, Common.

#### ARISTOLOCHIACE - Birthwort Family.

427. ASARUM Canadense, L. Found at Queensbury by Prof. Bailey.

#### CHEROPODIACEÆ-Goosefoot Family.

428. CHENOPODIUM ALBUM, L. Lamb's Quarters. Pigweed. A very common weed in cultivated grounds.

429. BOTRYS, L. Jerusalem Oak. Feather Geranium. On the shore at Government House. Probably an outcast from the garden.

430, C. URBICUM, L. At the Railway Depot, Carleton.

431.

BLITTM capitalum, L. Strawberry Blite. Sometimes found in gardens.
ATRIPLEX patula, L. Several forms of this very variable plant occur along the sea coast. 432.

433. Salicornia herbacea, L. Glasswort. Samphire. Common on salt marshes.

434. SUAEDA maritima, Dumortier. Sea-Blite. Salt marshes on the coast.

Salsola Kali, L. Common Saltwort. A fleshy, branching herb, with awl-shaped, prickly-435. pointed leaves, growing in the sand on the sea-shore. Common.

#### POLYGONAUE.E-Buckwheat Family.

- 436. POLYGONUM PERSICARIA, L. Lady's Thumb. In yards and about dwellings. Common.
- 437. P. Hydropiper, L. Common Smartweed or Water-pepper. Wet grounds and ditches. Common. 438. P. amphibium, L. var., aquaticum, Willd. · Water Persicaria. In water, at Hammond

River. Var. terrestre, Willd. Wet soil or in water. Oxbow, Salmon River, Kent Co.

P. aviculare, L. Knotgrass. Goose-grass. Door-weed. Abundant in yards. The Euro-439. pean plant with 8 stamens occurs at the Railway depot, Carleton.

440. P. maritimum, L. Coast Knotgrass. Sandy sea-shore.
441. P. arifolium, L. Halberd leaved Tear-thumb. Low grounds. Kouchibouguac.
442. P. sagittatum, L. Arrow leaved Tear thumb. Low grounds. Common.

- 443. P. Convolvulus, L. Black Bindured. Collivated and waste grounds.
  444. P. cilinode, Michx. In thickets or rocky pieces, climbing over shrubs and fallen trees. Rather common.
- P. dumetorum, L., var. scandens, Gray. Climbing False Buckwheat. In damp thickets, twining over bushes, 8-12 feet high. Norton.

  P. Tartaricum, L. Rough Buckwheat. Cultivated and waste grounds. 445
- 446.
- FAGOPYRUM ESCULENTUM, Monch. Buckwheat. Cultivated grounds. 447. RUMEX PRATENSIS. Mert. Sent from Campbellton by Mr. Chalmers. 448.
- 449.
- 450.

451.

452. 453.

R. orbiculatus, Gray. Great Water-Dock. In wet places. Kent.
R. salicifolius, Weinmann. White Dock. Shore of Richibuto River.
R. crispus L. Curled Dock Frederiction, in fields.
R. obtusifolius. L. Bitter Dock. Tabusintac, on Bathurst Road.
R. maritimus, L. Golden Dock. On shore, near mouth of Molus River. Shediac.
R. ACETOSELLA, L. Field or Sheep Sorrel. The most abundant weed in old and barren 454. fields, which are often red with its panicles.

# ELÆAGNACEÆ-Oleaster Family.

SHEPHERDIA Canadensis, Nutt. Canadian Shepherdia. Ulinging to rocky banks at Grand 455. Falls, St. John, and at Cape Bon Ami, Restigouche.

COMANDRA livida, Richardson. Bastard Toad-Flax. Near St. John. Spec'mens received 456. from Mr. Matthew.

#### CALLITRICHACE #-Water Starworts.

CALLITRICHE verna, L. Common in stagnant water, ditches, etc. 457.

458. C. autumnalis, L. Growing in a pond at Rothesay station.

# EUPHORBIACEÆ Spurge Family.

EUPHORBIA polygonifolia, L. Kouchibouguac beach in sand. Rare. 459.

E. HELOSCOPIA, L. River Charlo. Buctouche. Rather rare. 460.

461.

E. CYPARISSIAS, L. Have only noticed it in gardens. E. PEPLUS, L. Spontaneous in gardens at Richibucto. 462.

#### EMPETRACE E-Crowberry Family.

463. EMPETRUM nigrum, L. Black Crowberry. Hillocks in bogs. Sometimes hanging over rocky banks near the coast.

COREMA Conradii, Torrey. Broom Crowberry. Very like the preceding. Abundant in 464. sphagnous bog in rear of Carleton.

### URTICACEÆ Nettle Family.

UIMUS Americana, L. American or White Elm. Very common on rich intervales. URTICA gracilis. Ait. Nettle. Moist grounds in waste places. Rather common. 465.

466.

467. U. URENS, L. Stinging Nettle. Bass River. Not common.

468.

LAPORTEA Canadensis, Gaudichaud. Wood-Nettle. Rich intervales. Aug. PILEA pumila, Gray. Richweed. Clearweed. Damp shaded places. Norton. Rare. 469.

470. Humulus Lupulus, L. Common Hop. Cultivated, scarcely wild.

#### JUGLANDACEÆ-Walnut Family.

471. Juglans cinerea, L. Butternut. Rich woods along the St. John and its tributaries. Have not noticed it in northern counties.

#### CUPULIFERÆ-Oak Fanily.

472. QUERCUS rubra, L. Red oak. Common.

473. FAGUS ferruginea, Ait. American Beech. A valuable forest tree growing in dry land.

Corylus rostrata, Ait. Beoked Hazel-nut. Along the banks of streams. Common. 474.

475. OSTRYA Virginica, Willd. American Hop-Hornbeam. Lever wood. In rich woods. Rather scarce.

#### MYRICACE A-Sweet-Gale Family.

- 476. Myrica Gale, L. Sweet Gale. Wet places in barrens and along low shores of ponds and streams. Common.
  - M. cerifera, L. Bayberry. Wax-Myrtle. Sand beaches on the sea-shore.

Comptonia asplenifolia, Ait. Sweet-Fern. Abundant in dry barren places. 478.

### BETULACEÆ. Birch Family.

- 479. BETULA lenta L. Cherry Birch. Sweet Birch. Black-Birch. One of our finest and most valuable forest trees. Moist soil. Common.
- 480. B. lutea, Michx. f. Yellow or Gray Birch. A smaller tree than preceding. Moist rich soil. Common.
- 481. B. alba, var. populifolia, Spach. Small White Birch. On poor soil. Bark very white and thin.
- 482. B. papyracea, Ait. Canoe Birch. A fine large tree with tough bark used for making canoes and many articles for household use among the early settlers. Common in rich soil.
- 483.
- B. pumila, L. Low Birch. A small shrub 2-6 feet high, growing in swamps and bogs. ALNUS incana, Willd. Speckled or Hoary Abler. Borders of streams, forming thickets. 484.
- 485. A. viridis DC. Green or Mountain Alder. Common in damp soil.

### SALICACEÆ-Willow Family.

- 486. SALIX humilis, Marshall, Prairie Willow. Dry barrens, 2-6 feet high. Leaves downy May. or woolly beneath. Common.
- 487. S. discolor, Mahl. Glaucous Willow. Our earliest flowering willow. Leaves glaucous beneath and smooth above. Banks of streams and wet lands. May. Like the preceding species the fruiting catkins ripen and drop off before the leaves appear.
- 488.
- 489.
- S. VIMINALIS, L. Basket Osier. Cultivated in a few places.
  S. cordata, Muhl. Heart-leaved Willow. Low inundated banks of streams.
  S. livida, Wahl, var. occidentalis, Gray. Livid Willow. The lateral catkins have a few 490. leafy bracts at the base and appear with the leaves in June.
- S. lucida, Muhl. Shining Willow. The long, tapering, shining leaves render this our most beautiful native willow. The catkins are borne on the summit of the leafy 491. branches of the season.
- S. nigra, Marsh. Black Willow. Harris Cove, Kennebecasis. 492.
- 493.
- S. FRAGILIS, L. Brittle Willow. Often planted for shade and ornament. S. BABYLONICA, Tourne. Weeping Willow. Cultivated for ornament. S. myrtylloides, L. Myrtle Willow. A low shrub 1—2 feet high in bogs. 494.
- 495. S. pyrifolia, Anderss. Abundant in New Brunswick, though apparently unknown in the 496.
- United States. Several other species of willow are met with in cultivation.
- 497. S. ACUTIFOLIA, L. May be seen in gardens at Kingston and Bass River, Kent Co. Populus tremuloides, Michx. White Poplar. A very common tree 20-50 feet high. 498.
- P. grandidentata, Michx. Large-toothed Aspen. The young leaves are covered with 499. white silky wool, which give them the appearance of being blighted when seen from a distance. Common.
- P. balsamifera, L. Balsam Poplar. Tacamahac. Borders of rivers and swamps. Not 500. common.
- 501.
- Var. candicans, Gray. Balm of Gilead. Common in cultivation.
  P. DILATATA, Ait. Lombardy Poplar. Extensively planted.
  P. Alba, L. Abele or White Poplar. Occasionally planted for ornament. 502.

#### CONIFERÆ-Pine Family.

- PINUS Banksiana, Lambert. Scrub Pine. A low straggling tree springing up abundantly 503. on dry burned barrens.
- P. resinosa, Ait. Red Pine. A fine looking tree, valuable for its lumber. 504.
- P. Strobus, L. White Pine. Our finest and most valuable forest tree, upon which the 505. lumbering interests of the country largely depend.
- ABIES nigra, Poir. Black or Double Spruce. Very abundant; a scrubby form, grows in 506. wet swamps and bogs.
- A. alba, Michx. White Spruce. A much finer tree and more rapid grower than the pre-507. ceding. Valuable for its lumber, which is extensively manufactured for export.
- Canadensis, Michx. Hemlock. A large tree covering extensive districts in some parts of the Province. Bark used for tanning. Wood extensively employed in build-508. ings, wharfs, bridges, etc., but not exported as lumber.
- 509. A. balsamea, Marshall. Balsam Fir. A very common tree, but only employed in manu-
- factures to a very limited extent.

  LARIX Americana, Michx. American Larch. Hackmatac. Tamarack. Called in many neighborhoods. A valuable tree, extensively used in shipbuilding, etc. Hackmatac. Tamarack. Called Juniper 510.
- Thuja occidentalis, L. American Arbor Vitw. Cedar. A fine tree in some localities. Its light and durable wood is much used for bridges, fences, shingles, etc. 511.
- JUNIPERUS communis, L. Common Juniper. A low spreading shrub in dry pastures, 512. and barren hills. St. John.
- J. Sabina, L., var. procumbens, Pursh. Sand beach, Eel River, Restigouche. 513.
- TAXUS baccata, L., var. Canadensis, Gray. American Yew. Ground Hemlock. 514.

525.

# ARACEÆ-Arum Family.

ARISEMA triphyllum, Torr. Indian Turnip. Rich woods and banks of streams. Common. 515. June.

CALLA palustris, L. Water Arum. A low, perennial herb, growing in cold bogs, with a 516. long, creeping rootstock, bearing heart-shaped, long-petioled leaves and solitary scapes. Scarce.

ACORUS Calamus, L. Sweet Hlag. Calamus. The long, creeping roo'stocks are pungent 517. and aromatic, and employed in medicine.

# TYPHACE Æ-Cat-tail Family.

TYPHA latifolia, L. Cat tail Flag. Reed-mace. Common in wet muddy places. 518.

Sparganium eurycarpum, Engelm. Bur-reed. A specimen in the University Herbarium was collected at "Sugar Island." 519.

S. simplex, Hudson. In wet places and ditches. var. Nuttallii, Engelm. Rather scarce. In water. 520. var. angustifolium. Engelm. The leaves floating on the water.

### NAIADACEÆ-Pondweed Family.

Zannichellia palustris, L. Horned Pondweed. Growing under water in streams rendered 521. brackish by the tides. Rather rare

ZOSTERA marina, L. Grass-wrack. Eel-grass. A grass-like plant growing under water in shallow bays along the coast.

Ruppia maritima, L. A marine plant growing under water in estuaries and bays along the coast. July-Aug. 523. 524.

POTAMOGETON natans, L. Pondweed. In slow flowing water, Salmon River, Kent Co. P. Claytonii, Tuckerman. Still water or slow streams. Rather common. In the Kennebeccasis at Norton.

526. P. gramineus, L. In flowing water at Coal Branch, Richibucto. 527. 528.

P. prælongus, Wulfen. Ponds and slow streams, Bass River.
P. prælongus, Wulfen. Ponds and slow streams. Probably common.
P. compressus, L. Ponds and slow-flowing water. St. John Co.
P. pauciflorus, Pursh. Still or stagnant water. Restigouche. 529. 530. 531.

532. P. pectinatus, L. Kennebecasis. Specimen received from Mr. Matthew.

# ALISMACEÆ-Water-Plantain Family.

TRIGLOCIHN palustre, L. Arrow-grass. In fresh and brackish marshes. Rather rare. 533. Easily known by its linear club-shaped fruit.

T. maritimum, L. Common in salt marshes along the coast. 534.

535. SCHEUCHZERIA palustris, L. A peculiar little herb with jointed creeping rootstocks which gradually pass into a zigzag stem nearly surrounded by the bases of the grasslike leaves. It bears a loose raceme of a few flowers with sheathing tracts. Soft peat bogs and apparently rare. Richibucto. Fredericton. 536.

ALISMA Plantago, L., var. Americanum, Gray. Water-Plantain. In shallow water. Common.

SAGITTARIA variabilis, Engelm. Arrow-head. Several forms or varieties of this extremely 537. variable plant occur presenting leaves of widely different aspect. Common in water or soft mud.

S. calycina, Engelm., var. spongiosa, Engelm. Growing near the head of the tide in 538. the Richibucto River. Rothsay.

539. S. graminea, Michx. Water. Rothsay. In a small lake near Richibucto.

#### ORCHIDACEÆ—Orchis Family.

HABENARIA tridentata, Hook. Wet commons and woods. Very common. July. 540. 541.

H. hyperborea, R. Br. In wet cold bogs and woods. Rather rare.

H. dilatata. Gray. Bogs and ditches at the roadside through swamps. Common.
H. obtusata, Richardson. Known by its single obovate or spatulate-oblong leaf and greenish white flowers. In cold damp woods. Rare. Coal Branch, Richibucto. June.
H. Hookeri, Torr. Kent Co. Not rare. 542. 543. 544.

545.

H. orbiculata, Torr. In rich shady woods. Rather rare. Kent Co. H. blephariglottis, Hook. Peat-bogs. Kouchibouguac. A specimen in the University 546. Herbarium collected at Fredericton.

H. psycodes, Gray. A very pretty fragrant plant with purple fringed flowers crowded in 547. a spike 4 to 10 inches long and common in wet meadows and bogs. July-Aug.

H. fimbriata, R. Br. Purple Fringed-Orchis. Flowers large and fringed with a lip 1 to 548. 1 inch broad crowded in a spike. A very beautiful plant in wet meadows. June. Rare.

549. GOODYERA repens, R. Br. A small slender plant 5-7 inches high with ovate leaves bearing irregular patches of white. The flowers are few and form a loose one-sided spike. Woods under shade of evergreens. Aug. Rare.

- 550. Spiranthes Romanzoviana, Chamisso. Ladies' Tresses. Scarce. In grassy places.
- 551.
- LISTERA cordata, R. Brown. Twayblade. Cold damp woods. Rare. L. convallarioides, Hook. On the brink of a shaded brook. Bass River. 552.
- ARETHUSA bulbosa, L. Arcthusa. A pretty little plant 4-6 inches high, springing from 553. a round solid bulb and terminated by a single rose-purple flower from one to two inches long. It has only a single grass-like leaf which appears after flowering. The lip of the flower is recurved at the tip and bearded down the face. Peat bogs. May.
- Richibucto, Fredericton. Rare.

  Pogonia ophioglossoides, Nutt. \*Pogonia. A pretty little sweet-scented plant 6-9 554. inches high. The flower one inch long. A single leaf near the middle of the stem. Bogs. June-July. Scarce. Kent Co.
- Calopogon pulchellus, R. Br. Calopogon. Stem one foot high, springing from a small 555. solid bulb, bearing a single linear grass-like leaf and 2-6 flowers, which are finely marked with white, yellow and purple club-shaped hairs towards the dilated apex. Flowers pink, \(\frac{3}{4}\) to 1 inch broad. Bogs. Common.
- Calypso borealis, Salisbury. Named from the goddess Calypso. A rare little bog plant 556. growing from a bulb which rests in the moss. It bears a single thin heart-shaped leaf and a large handsome flower variegated with purple, pink and yellow. May. Have only seen a single specimen, which was collected by Mr. Hay near St. John, 1877.
- MICROSTYLIS ophioglossoides, Nutt. Adder's Mouth. A little plant 2-4 inches high, 557. springing from a small bulb and bearing a single ovate clasping leaf near the middle. The minute greenish flowers form a short raceme. Damp barrens. July,
- LIPARIS Loeselii, Richard. Twayblade. A little plant growing in bogs, with solid bulbs, 558. two root-leaves and a slender raceme of greenish or vellowish-green flowers. June. Harris Cove. St. Stephen, Mr. Vroom. Rare.
- 559. CORALLORHIZA innata, R. Br. Coral Root. A peculiar little plant with root like a mass of coral, a brownish or yellowish stem, 3-8 inches high, a few sheaths instead of leaves, and a small raceme of dull-colored flowers. Damp woods. May-June. Scarce.
- C. multiflora, Nutt. Very like the preceding only larger, 9-18 inches high, 10-30 flow-560.
- ered, stem purplish. Dry woods. Rather common, July-Aug. CYPRIPEDIUM parviflorum, Salish. Smaller Lady's Yellow Slipper. A beautiful and 561. fragrant plant growing in bogs and low woods. Restigouche. Apparently rare.
- C. spectabile, Swartz. Showy Lady's Slipper. Wet swamps. St. John County. Rare. C. acaule, Ait. Stemless Lady's Slipper. Moccasin-flower. Dry woods, under ever-562. 563.
- 564. greens. Common. June.

# IRIDACEÆ-Iris Family.

- IRIS versicolor, L. Blue Flag. Very common in wet places. May—June. Sisyrinchium Bermudiana, L. Blue-eyed Grass. Among grass. Everywhere. 565.
- 566.

#### SMILACEÆ-Smilax Family.

SMILAX herbacea, L. Carrion-Flower. 3 6 feet high; produce clusters of bluish-black 567. berries. Easily known by its carrion-scented flowers. Banks of streams on intervales. Rothesay. Fredericton.

### LILIACE E-Lily Family.

- Common about St. John and Loch Lomond. TRILLIUM erectum, L. Purple Trillium. 568. Have not noticed it in northern counties. June.
- T. cernuum, L. Nodding Trillium. Wake Robin. Moist woods. Rather scarce. 569.
- T. erythrocarpum, Michx. Painted Trillium. Common, especially in recently burned 570. As it is one of our earliest large flowers, the following dates of its flowering at Bass River, Kent County, may be interesting: May 28, 1867; May 28, 1868; May 29, 1869; May 31, 1870.
- MEDEOLA Virginica, L. Indian Cucumber. In rich woods. Common. June. 571.
- 572.
- ZYGADENUS glaucus, Nutt. Zygadene. Sand beach at Belledune. Veratrum viride, Ait. American White Helebore. Indian Poke. On intervales. Rather 573. common.
- Tofieldia glutinosa, Willd. False Asphodel. In moist grounds. Sent from Restigouche 574. by Mr. Chalmers.
- UVULARIA sessilifolia, L. Bellwort. Low rich ground near thickets. Rather common, 575.
- STREPTOPUS amplexifolius, D.C. Twisted-Stalk. Cold woods. Not common. June. 576.
- S. roseus, Michx. Cold damp woods. Common. 577.
- 577.\* CLINTONIA borealis, Raf. Cold moist woods. Common.
- 578. SMILACINA racemosa, Desf. False Spikenard. Rather common.
- S. stellata, Desf. Moist banks. Kouchibouguac. May-June. 579.
- S. trifolia, Desf. Cold boggy places. Rather common. 580.

- 581. S. bifolia, Ker. Moist woods. Very common. Single leaves without flowers or fruit are abundant in the edge of woods.
- 582. LILIUM Canadense, L. Wild Yellow Lily. Intervales and moist meadows. Common.
- 583. ERYTHRONIUM Americanum, Smith. Yellow Adder's-tonque. Low copses. Abundant about Fredericton. Have not noticed it in northern counties except one plant in Kent.
- 584. ALLIUM Scheenoprasum, L. Chives. The plants grow separately, not in clusters as in gardens, and are much larger than the cultivated form. In sand on shores subject to inundatiou. Rothsav. Nepisiquit.
- 585. HEMEROCALLIS FULVA, L. Common Day-Lily. Escaped from gardens in a few places.

### JUNCACEÆ-Rush Family.

- 586. Luzula pilosa, Willd. Woods and old fields. Common.
- 587. L. campestris, DC. Wood-Rush. Dry fields. Common. May.
- 588. Juneus effusus, L. Common or Soft Rush. Abundant in marshy ground.
- var. conglomeratus, Gray. Common in same places. J. filiformis, L. Damp places. Scarce.
- 589
- 590. J. Balticus. Dethard. Sandy shores. Common near the coast.
- 591.
- J. Stygius, L. Peat Bogs. Richibucto. Point Escuminac. J. bufonius, L. Very common in damp grounds along roads. 592
- J. Gerardi, Loisel. Black-Grass. Common on salt marshes round the coast. J. tenuis, Willd. Low grounds and roadsides. Common. J. Greenii, Oakes & Tuckerm. Wet, sandy places. Kent County. 593.
- 594.
- 595.
- 596. J. nodosus, L. Ditches and swampy places. Restigouche.
- J. Canadensis, J. Gay, var. longicaudatus, Engelm. Common. 597. Var. coarctatus, Engelin. Wet barrens. Rither Common.

# PONTEDERIACEÆ-Pickerel-weed Family.

Pickerel-weed. A very conspicuous plant growing in shallow 598. PONTEDERIA cordata, L. water. Leaves arrow-heart-shaped, and flowers blue, in a somewhat lengthy spik?. Have not noticed it elsewhere. Kennebeccasis.

### ERIOCAULONACE E-Pipewort Family.

ERIOCAULON septangulare, With. In shallow water around the borders of lakes. 599.

#### CYPERACEÆ-Sedge Family.

- 600. CYPERUS phymatodes, Muhl. Sandy bank of the Kennebeccasis at Norton. Rare.
- 601. DULICHIUM spathaceum, Pers. Dutichium. Very wet places and borders of ponds. Common.
- 602. ELEOCHARIS obtusa, Schultes. Muddy places. Very common.
- E. palustris, R. Br. Common; both the larger form which grows in water, and the 603. smaller form which grows in wet, grassy places.

  E. tenuis Schultes. Wet meadows and bogs. Kouchibouguac.

  E. acicularis, R. Br. Muddy shores and ditches. Common.

  E. pygmæa. Torr. Brackish marshes and shores. Kent.
- 604.
- 605.
- 606.
- SCIRPUS cæspitosus, L. Peat Bogs. Common. 607.
- 608. S. pungens, Vahl. Common on salt or brackish shores.
- S. validus, Vahl. Great Bulrush. In still, fresh water. Common. 609.
- 610. S. maritimus, L. Sea Club-Rush. Salt marshes. Common.
- 611.
- S. microcarpus, Presl. Wet, low places. Common.
  S. Eriophorum, Michx. Wool-Grass. Swampy, wet grounds. Common. 612.
- S. atrovirens, Muhl. Wet meadows and bogs. 613. Norton.
- ERIOPHORUM alpinum, L. Cotton-Grass. Cold bogs. Grand Falls of Nepisiquit. Near 614. St. John. Rare.
- 615. E. vaginatum, L. Rather common in bogs.
- E. russeolum, Fries. The wool copper-colored. In a bog near Richibucto. June. 616.
- E. Virginicum, L. In bogs. Common. Wool rusty or copper color. July-Aug. E. polystachyon, L. In boggy or wet grounds. Common. 617.
- 618.
- E. gracile, Koch. Cold bogs. Rather common. 619.
- 620.
- RHYNCHOSPORA alba, Vahl. Beat Rush. Peat bogs. Near Richibucto. BLYSMUS rufus, L. Eel River, Restigouche. In marshy ground. As this plant is not 621. described by American botanists, it would seem to be new to this country.
- 622. CAREX gynocrates, Wormskiold. Sent by Mr. Chalmers from Restigouche.
- 623.
- C. panciflora, Lightfoot. Bog near St. John.C. polytrichoides, Muhl. Low grounds. Rather common. 624.
- U. teretiuscula, Good. Swamps. Rather common. 625.
- C. vulpinoidea, Michx. Low meadows. Common. 626.
- 627.
- C. stipata, Muhl. Low grounds. Common. C. tenella, Schk. Damp shady grounds. Common. 628.
- C. trisperma, Dew. Swamps and woods; common. 629.

- 630. C. canescens, L. Wet meadow and marshy places; common.
- var. vitilis, Gray. Damp woods; not common. C. Deweyana, Schw. Open woods. Bass River, Kent Co. 631. C. stellulata, L., var. scirpoides, Gray. Wet ground; common. var. angustata, Gray. Wet ground. Bass River. Rare. 632.
- 633. C. scoparia, Schr. Very common in damp meadows. var. minor, Boot. Sent from Restigouche by Mr. Chalmers.

- C. lagopodioides, Schk. Moist open woods. Kent Co. C. adusta, Boot. Moist borders of woods. Kent Co. There are two forms of this 635. plant as determined by Olney, one of which he identifies as C. albolutescens, Echw. var-636.
- glomera ta, Olney, and the other as var. sparsiflora, Olney.
  C. fœnea, Willd, var. sabulonum, Gray. C. silicea, Olney. Sand beaches on the coast.
  C. straminea, Schk. var., typica, Gray. Open woods. Kent Co. Var. tenera. Gray. Open woods. Kent Co. Rather rare. 637. C. vulgaris, Fries. Wet grassy places. Rather rare. A very variable plant and often 638.
- difficult to determine. 639. C. aquatilis, Wahl. Borders of streams or lakes. Common in St. John Co.

C. aperta, Boot. Wet places; near Richibucto. C. stricta, Lam. Wet swampy grounds; Richibucto 640.

- 641. C. lenticularis, Michx. Wet banks of streams; scarce. 642.
- C. salina, Wahl. Salt marsh at Molus River; only found it once. 643.

C. maritima, Vahl. Salt marshes; not rare. 644.

C. crinita, Lam. Banks of brooks; very common. 645.

646. C. limosa, L. Peat bogs; common.

- 647. C. irrigua, Smith. Peat bogs; common.
- 648. C. Buxbaumii, Wahl. Boggy grounds; Restigouche. C. aurea, Nutt. On limestone rocks; St. John Co. C. panicea, L. Wet meadows; Bass River: rare. 649.

650.

granularis, Muhl. Wet grounds; rather rare; Bass River. 651.

652. C. pallescens, L., var. undulata, Gray. Bass River; rather common. 653. C. gracillima, Schw. Damp grounds; Bass River.

- C. laxiflora, Lam. Several forms or varieties of this exceedingly variable plant are 654. found in open woods and copses.
- 655. C. umbellata, Schk. Rocky ground near the Manse at Blackville.

C. Novæ Angliæ, Schw. St. John, July 1869. 656.

657. C. Emmonsii, Dew. Dry bank near Manse, Blackville; June 1865.

658. C. Pennsylvanica, Lam. Dry knolls in woods; Kent Co.

- C. varia, Muhl. Dry hills in woods; Bass River.
  C. scabrata, Schw. Wet grounds; Bass River.
  C. arctata, Boot. Margin of dry woods beside Manse, Bass River.
  C. debilis, Michx. Moist grounds; rather common. 659 660.
- 661.

662.

C. capillaris, L. Bass River 1865; rare. 663.

C. flexilis, Rudge. Moist shady places; Weldford Station. 664.

C. flava L. Wet meadows; common. 665.

- 666.
- C. Œderi, Ehrh. Wet rocks and cliffs; St. John Co.
  C. filiformis, L. Peat bogs and water; Lake Elsie near Richibucto.
  C. Houghtonii, Torr. Dry grass fields; Kent Co. 667.

668.

- 669. C. riparia, Curtis. In water near Weldford Station; 1868.
- C. Pseudo-Cyperus, L. Borders of lakes and in ditches; rather common.
  C. hystricina, Willd. Wet grounds; Lily Lake, St. John.
  C. tentaculata, Muhl. Wet places; common. 670.

671.

- 672.
- 673. C. intumescens, Rudge. Damp meadows and swamps; common.

674.

675.

- 676.
- C. lupulina, Muhl. Wet grounds. Hampton.
  C. rostrata, Michx. Bogs. Rothesay.
  C. retrorsa, Schw. Marshy grounds; common.
  C. utriculata, Boot. Wet sy amps and water. 677. Kent County. Vaseyi, Dew. In water at Lake Elsie, near Richibucto monile, Tuckerm. Wet places. Bass River. Fredericton. 678
- 679.
- 680. Tuckermani, Boot. Wet bank of stream, Bass River.
- C. oligosperma, Michx. In a peat bog near Richibucto. 681.
- 682. C. miliaris, Michx. Wet borders of Kennebeccasis at Rothesay.

#### GRAMINEÆ-Grass Family.

683. LEERSIA oryzoides, Swartz. Rice Cut-grass. A perennial marsh grass, with widely branched panicles and flat spikelets; the flat leaves and sheaths are covered with minute hooked prickles, which cut the hand when drawn along them; the palets are also strongly bristly-ciliate. Common in very wet places. Aug.

ALOPECURUS GENICULATUS, L. Floating Fortail Grass. A perennial grass, bearing a strong resemblance to Timothy. The stems are bent at the lower joints; the upper leaves are about the length of the sheaths, and an awn springing from near the base of the palet, projects about half its length beyond it. Moist grounds. Carleton. July.

- 685. A. aristulatus, Michx. Wild Foxtail Grass. Easily distinguished from the preceding by its clancous stem and leaves, and by the awn which rises from the palet a little below its middle, being scarcely visible above it. Common in water and very wet places.
- 686. PHLEUM PRATENSE, L. Timothy. Herd's Grass of the Northern States. cultivated for hav.
- AGROSTIS scabra. Willd. Hair Grass. Conspicuous by its long, hair-like spreading 687 branches of a purplish color, which are whorled and rough, with minute bristles. The flowers are borne at and near the ends of the branches. Dried places; common. June -Aug. Stems very slender; 1-2 ft. high.
- A canina, L. Brown Bent-Grass. Stem 10-20 inches high; the lower leaves are rolled 688. up so as to be bristleform; the upper ones are flat; branches short, hair-like, whorled and divided into several branchlets, each bearing a single flower. A short awn projects from the palet. Molus River, Kent County.
- 689.
- A. vulgaris, With. Red Top. Abundant in old or dry fields.
  A. alba, L. White Bent Grass. The rootstocks send out runners during summer, the 690. stems are bent at the base, and the short branches close up around the stem after
- flowering, forming a contracted pannicle. Common in damp grassy ground.

  Cinna arundinacea, L., var. pendula, Gray. Wood Reed Grass. A tall (2-6 feet high) grass growing in damp shady woods and bearing a large loose panicle of 691. flowers. The branches of the panicle are hairlike, and in fours or fives; the pedicels are very rough and the flowers droop. July-Aug. Common.
- MUHLENBERGIA glomerata, Trin. Drop-seed Grass. Root stock coarse, scalv, creeping; 692. culm often branched several times from near the root, 1-2 feet high; panicle contracted into a narrow interrupted spike 2-3 inches long; glumes linear and awned. In low grounds, Kent. Banks of Kennebecasis,
- M. sylvatica, Torr and Gray. Culm 2-3 feet high, much branched and spreading; 693. leaves 4-6 inches long; the glumes are a little shorter than the palets, which bear awns two or three times as long as the spikelets. Low or rocky places. Fredericton. Rather rare.
- Brachyelytrum aristatum, Benuv. A ta'l (2-3 feet high) slender, unbranched, 694. broad leafed grass, with creeping rootstocks and a simple constructed spike composed of a few long awned spikelets. The culm and leaves are hairy, especially the margins of the latter. The spikelets drop off very readily. Rocky woods. Rather common.
- CALAMAGROTIS Canadensis, Beauv. Blue Joint Grass. The most abundant grass in 695. wild meadows and cut for hay. Culm 3-5 feet high, smooth, erect; panicle rather loose, having branches in fours or fives. The gluines are purplish and remain open showing a large number of hairs around the flowers. Wet grounds. July.
- ORYZOPSIS asperifolia, Michx. Mountain Rice. Culm 12 18 inches high, not branched 696. except at the root, where it is purple; leaves from near the base as long as the culm or longer, and narrow, rigid, sharp pointed; those on the stem very few and short; panicle 2.4 inches long, not branched; the lower palet bears a long bent awn. The leaves remain green through the winter. Rich woods. Scarce. Port Elgin.
- 697. Spartina cynosuroides, Willd, Fresh-water Cord Grass. A very coarse, rigid grass. 3 5 feet high, with smooth culms, leaves 2-4 feet long, rolled inwards and very sharppointed. Marshes, especially near the coast.
- S. juncea, Willd. Rush Salt Grass Culm 12-20 inches high, smooth, slender, rigid; 698. leaves with long sheaths, strongly rolled inwards, stiff and smooth. Growing on salt marshes round the coast.
- S. stricta, Roth., var., alterniflora, Gray. Salt Marsh-Grass. Stem succulent, 1-4 feet 699. high; leaves strongly convolute, spikes few in number, erect and soft; the rachis extending beyond the flowers, and ending in a long, sharp point. Salt marshes on the coast. This grass is said to have a strong, rancid smell, to be greedily eaten by cattle and to affect the mi'k made from it.
- DACTYLIS GLOMERATA, L. Orchard Grass. A rather coarse (1-3 feet high) grass, 700. growing in fields and yards. The leaves are long, narrow and keeled, and the flowers in dense clusters. Makes good hay. June.
- 701. EATONIA Pennsylvanica, Gray. A delicate, (2 feet high) slender, unbranched grass, growing in tufts, with long, (5-19 inches) loose, greenish panicles. Restigouche. Kennebeccasis. Scarce. Moist woods.
- Rattlesnake-Grass. 702. GLYCERIA Canadensis, Trin. Somewhat conspicuous by its large, nodding, open panicles, and collected for ornament. Culm stout, 11 to 3 feet high. Growing in bogs and very wet places.
- G. elongata, Trin. About 3 feet high; leaves very narrow and long, (1 foot or more), 703. rough; panicles 8 to 12 inches long, nodding, very slender. In wet woods. Bass River.

- 704. G. nervata, Trin. Fowl Mea low Grass. 1.3 feet high, leaves long; panicle diffusely spreading, its branches hair-like and at length drooping, and the flowers generally purplish. In damp grounds and meadows. Common.
- 705. G. aquatica, Smith. Reel Meadow-Grass. A stout, (3-5 feet) tall grass, with large leaves 1-2 feet long, \(\frac{1}{3}\) to \(\frac{1}{2}\) inch wide, and ample, spreading panicle, growing in water or very wet places. Common. July
- G. fluitans, R. Br Calm flattened, 2-4 feet high, leaves smooth, panicle often 1 foot 706. long, contracted, the liniar spikelets bearing 7-13 flowers each. In shallow water. Common. July-Aug.
- 707. G. maritima, Wahl. Set Spetr-Grass. A very slender grass, 1 foot high; leaves very small and involute; panicle with brunches single or in pairs. Spikelets 4-8 flowered. Sea coast. Common.
- G. distans, Wahl. Very like the last, but the branches of the panicle 3.5 in a half 708.
- whorl and spreading. Salt murshes. Bathurst.

  Por annua, L. Low Spear-Grass. A low, spreading grass, 3-6 inches high, with 709. flattened culms and panicles often one-sided. A troublesome weed in gardens and cultivated grounds. Flowers all summer.
- 710. P. compressa, L. Wire Grass. Blue Grass. Calm much flattened, decumbent and rooting at the base, 12-18 inches high, leaves short, p unicle narrow, about 3 inches long by 1 inch broad, somewhat one-sided, spikelets flat and 3-8 flowered. A valuable grass, said to be sweet and nutritious and growing on dry and waste ground. Rare with us. Harvey, York Co. St. John.
- 711. P. serotina, Ehrhart. False Red top. Fowl Meadow Grass. An erect, 2 to 3 feet high, slender, tufted grass, growing abundantly along brooks and in damp fields, and making good hay. Its leaves are narrow, soft and smooth, and its flowers generally tinged with purple. July-Aug.
- P. pratensis, L. Green or Common Meadow Grass. Kentucky Blue Grass. Spear 712. Grass. June Grass. A smooth (1.2 feet high) grass, with numerous long leaves rising from near the ground, ripening early (June). The panicles become dry and withered while the culm remains green. It is scarce with us, but is said to be an excellent grass both for hay and pasturage in the United States.
- TRIVIALIS, L. Rough Meadow Grass. Culm and leaves somewhat rough, 2.3 feet 713. high; panicle wide spreading, its branches 4-5 together in half whorls. Introduced with ballast at Richibucto and probably elsewhere. July.
- FESTUCA ovina, L, var. rubra, Gray. Sheep's Fescue. A short (6-10 inches high) 714. grass, growing in loose tufts, with a short, somewhat one-sided panicle and narrow rough leaves. In dry rocky places. Scarce. A pasture grass in the United States.
- Bromus secalinus, L. Cheat or Chess. Sometimes, though rarely, seen in wheat 715. Perhaps overlooked from its resemblance to wheat. 716. B. RACEMOSUS, L. Upright Chess. Among wheat. Apparently very rare with us.
- B. ciliatus, L. Tall (3 to 4 feet high), smooth, or sometimes a little hairy; panicle 717. large, 5-8 inches long, erect at first but nodding when ripe. Growing in rich moist woods on intervales. Common.
- 718. PHRAGMITES communis, Trin. Reed. A tail (6-10 feet high) coarse grass, with leaves 1-2 feet long by 1-2 inches broad and rough-edged; panicle large and diffuse. Sent from Restigouche by Mr. Chalmers.
- TRITICUM repens, L. Couch-Grass. Quitch-Grass. Quitch-Grass. A very troublesome weed in sandy land, as it spreads by long running rootstocks beneath the surface, 719. and sends up stems from its numerous joints. It varies greatly, especially on the sea coast.
- T. caninum, I. Awned Wheat Grass. Dog's Couch-Grass. Looks somewhat like 720. slender bearded wheat; the culm 2-3 feet high, the spike 3-6 inches long; the awns mostly bent or spreading, and twice the length of the palet. Intervales.
- HORDEUM jubatum, L. Squirrel-tail Grass. Easily recognized by its iong awns, 721. (about 2 inches long), which give it the appearance of a squirrel's tail. Grows in sand near the sea shore. Common.
- ELYMUS Virginious, L. Lyme Grass. Wild Ryc. A coarse grass, 2-3 feet high, with 722. broad, rough, flat teaves and a dense spike 3.5 inches long, the flowers bearing short awns. The upper leaves have long sheaths enclosing the culm, nearly or quite up to the spike. Looks something like barley. Intervales. Common.
- E. Canadensis, L. A much stouter, coarser grass than the preceding. The spike is 723. from 5 9 inches long, generally nodding; the awns from 1-2 inches long; culm 3-5 feet, crect. Intervales. There is a specimen in the University Herb., but the writer has not seen the living plant.
- E. mollis, Trin. Culm 2 to 4 feet high, downy above, leaves rolled up and rigid, very 724. smooth, spike 7-8 inches long, glumes nearly 1 inch, no awns but soft silky. Sand beaches on the coast.

- 725. Danthonia spicata. Beauv. Wild Oat. Grass. A worthless grass growing on dry. barren commons, 10-15 inches high, with short, narrow leaves rolled inwards and hairy on the sheaths. The flowers are awned. When the leaves are pulled from the culm a small, imperfect panicle is found within the sheath. Common. June-Aug.
- 726. AVENA striata, Michx. Wild Oat. Slender, smooth, 13 to 2 feet high; leaves narrow and smooth; panicle slender, with purplish spikelets; flowers bearing a bent awn rising just below the two-cleft tip. Rather scarce on shaded hillsides. Bass River. Tabusintae on Bathurst road.

TRISECUM subspicatum, Beauy., var. molle, Gray. Culm about 10-12 inches high, very downy, bearing a contracted panicle about 2 inches long. The lower palet bears a bent awn below its two cleft tip. Rather rare on rocky banks. July.

AIRA flexuos 1, L. Common Hair Grass. An elegant erect grass, growing in small 728. tufts, about 18 to 24 inches high, with smooth culms and small involute bristle-form leaves near the root. The awn rises fram the lower palet a little above the base, and is at length bent and twisted and longer than the palet. Among the rocks near the mouth of the Kennebeccasis. June.

729. A. caspitosa, L. Differs from the preceding by being taller (1½-3 feet high), having the leaves flat and the awn straight, scarcely as long as the palet. Borders of

streams. Rather rare. Kennebecasis. Restigouche. June-July.

HIEROCHLOA borealis, Roem. and Schultes. Vanilla or Seneca Grass. A simple, erect, 730. glossy plant from 12-20 inches high, with a one-sided pyramidal panicle. Flowers without awns. Very fragrant. Said to be dedicated to the Virgin Mary, and strewed before the church doors on festival days in some parts of Prussia. It is also so plentiful in Iceland as to be used by the people to scent their apartments and clothes. Our earliest grass, flowering in May. Moist meadows. Common.

731. Anthoxanthum odoratum, L. Sweet Vernal Grass. A slender erect (12-18 inches

high) grass, with short pale green leaves and a spike-like panicle. Some of the palets are hairy and bear a bent awn from near their base. Common in grass fields and pastures and yielding a pleasant fragrance while drying. An early grass.

PHALARIS CANARIENSIS, L. Canary Grass. This pretty grass is spreading from ballast

about St. John.

733. P. arundinacea, L. Reed Canary Grass. A large showy grass, 2-4 feet high, with flat veined rough-edged leaves and spike-like panicles. Rather common in wet grounds. A cultivated variety of it (var. picta) is the well-known Ribbon Grass of the gardens, the leaves of which are longitudinally striped with white in endless diversity.

734. PANICUM capillare, L. Old Witch Grass. A rather low branching grass 12-18 inches high, with very hairy sheaths and leaves, and ample loose-spreading panicles. The pedicels are very slender, or capillary and rough, bearing small purple flowers. Grows in gardens and cultivated grounds as a weed. Often producing new branches and flowers nearly all summer. Easily recognized by its light, airy appearance and

hairy leaves and sheaths.

735. P. dichotomum, L. A very variable, delicate little grass, 8-12 inches high, bearing tufts of very short, thick leaves at the base, and a small, spreading panicle 1-3 inches long. Late in the season it produces branches, which continue increasing in number till autumn. Some specimens are very hairy, others smooth. In fields and woods. Common.

P. CRUS-GALLI, L. Barnyard-Grass. A very troublesome weed about barns and 736. gardens, as it produces an abundant crop of seed and continues seed-bearing all summer. The culms are stout and branch copiously from the base. Sometimes it is awnless and sometimes long-awned, especially in wet places or shores.

737. SETARIA GLAUCA, Beauv. Foxtail. Bottle-Grass. A common weed in gardens and

manured grounds, with a dense tawny yellow bristly spike, 2-4 inches long. 738. S. VIRIDIS, Beauv. Green Foxtail. Bottle Grass. Very like the preceding, but the spike and bristles green, and growing in cultivated grounds and gardens. July—Aug.

#### EQUISETACE E-Horsetail Family.

- 739. Very common. May.
- EQUISETUM arvense, L. Common Horsetail. Damp soil. Ver. E. sylvaticum, L. Damp, shady places. Very common. May. E. limosum, L. Rather common in shallow water and ditches. E. hyemale, L. Scouring-Rush. Shave Grass. Wet banks. V. 740. 741.
- 742. Very scarce.
- E. scirpoides, Michx. Common about River Charlo and Point LeNim. 743.

#### FILICES—Ferns.

744. Polypodium vulgare, L. Polypody. Common in clefts of rocks near St. John. Very rare in northern counties.

- ADIANTUM pedatum, L. Maidenhair Fern. A very graceful delicate fern in rich 745. woodlands. Upper Restigouche and Upper St. John.
- 746.
- PTERIS aquilina, L. Common Brake. Our most abundant fern, growing everywhere. Pelles gracilis, Hook. Cliff Brake. A very delicate little fern 3-6 inches high, growing in the cold dump clefts of densely shaded rocks. Morris' Rock, Resti-747. gouche. Grand Falls, St. John.
- 748. ASPLENIUM viride, Hudson. A delicate fern growing in tufts in the clefts of rocks. Very rare. Tettagouche Falls in Gloucester Co. Green Head, St. John Co.
- 749. A. thelypteroides, Michx. A fine fern 2 to 3 feet high, growing in rich shally woods. Scarce.
- 750. A. Filix-foemina, Bernh. A very variable and common fern, growing in rather moist rich soil. July.
- 751. Phegopteris polypodioides, Fee. Beech P lypod. A rather small plant 4 to 8 inches high and 21 to 5 inches wide, growing in shady woods. July.
- 752. P. Dryopteris, Fee. A pretty little fern growing in dry or rocky woods, 6 to 10 inches high and divided into three petioled, light-green, drooping divisions. Common. July.
- 753. ASPIDIUM Thelypteris, Swartz. Rather common in wet marshy places. August. delicate and graceful fern.
- 754. A. Noveboracense, Swartz. New York Fern. In swamps and moist woods. delicate fern, very like the preceding. Common. July.
- A. fragrans, Swartz. A low (4 to 12 inches high) lance-shaped fern, pleasantly aromatic and very rare. The writer has only found it in clefts of rocks at the railway 755. tunnel in Restigouche.
- 756. A. spinulosum, Swartz. A rather large fern remaining green through the winter. Two vars, are common, var. intermedium and var. dilatatum. One of our most common ferns.
- 757. A. cristatum, Swartz. Growing in swamps, 1 to 2 feet high and 5 to 7 inches broad. Not common. July.
- 758. A. marginale, Swartz. Marginal Shield Fern. A large handsome evergreen fern, in rocky woods. Rather common. The fruit dots are large and near the margin.
- 759. A. acrostichoides, Swartz. A narrow-lanceolate fern, about 12 to 18 inches high, growing in tuits in rocky woods. Common near St. John. Have only noticed a single tuft in the northern Counties, near Molus River, Kent.
- 760. A. aculeatum, Swartz, var. Braunii, Koch. A fine fern about 11 to 2 feet high, with a very hairy and chaffy stem, growing on wooded mountains. Sugar Loaf, Restigouche.
- 761. CYSTOPTERIS bulbifera, Bernh. A very tall, slender, tufted fern, generally producing bulblets on its under side and growing in damp shaded ravines. Restigouche. St. John.
- 762. C. fragilis, Bernh. A delicate fern, 6 to 8 inches high, growing on moist rocks. Common. July.
- 763. STRUTHIOPTERIS Germanica, Willd. Ostrich Fern. A splendid fer a, growing in large tufts on rich alluvial soil, often 4 feet high. Common.
- ONOCLEA Sensibilis, I. Sensitive Fern. About a foot high, growing in wet places, often in water. Very sensitive to frost. Common. July.

  Woodsia Ilvensis, R. Brown. A small rough tufted fern, growing on exposed rocks. 764.
- 765. Restigouche, on Sugar Loaf, and at mouth of Upsalquitch.
- W. glabella, R Brown. A smooth little tern, 2 to 5 inches high, growing on rocks.

  At tunnel, Restigouche. Rare. 766.
- DICKSONIA punctilobula, Kunze. Fine-haired Mountain Fern. A delicate fern, 2 to 3 767. feet high, growing very abundantly in moist soil in pastures, roadsides and open woods. July. Producing an agreeable odor.
- OSMUNDA regalis, L. Flowering Fern. A beautiful fern, from 2 to 5 feet high, growing 768. in swamps and wet places, and producing its fructification or spores on the top of the fronds. June.
- 769. O. Claytoniana, L. Interrupted Flowering Fern. About 2 to 3 feet high, bearing its fertile leaflets near the middle of the stem. Common in low grounds and wet
- woods. Fruiting early as it unfolds. June.

  O. cinnamomea, L. Cinnamon-Fern. A very common fern in wet swamps, growing in large clumps. The fertile fronds are very different from the sterile ones and 770. grow in the middle of the bunch. The fructification is cinnamon-colored, and decays before the sterile fronds attain their growth. Often 4 to 5 feet high. May.
- BOTRYCHIUM lanceolatum, Augstræm. A very graceful little fern, 3 to 10 inches high, growing in shady places in rich soil. Fredericton. Bass River. Rare. 771.
- 772. B. Virginicum, Swartz. A peculiar looking fern 1 to 2 feet high, growing in rich shady places. Rather common. At the mouth of the Upsalquitch is a reduced form, only a few inches high, on dry rocky heights. July.

B. lunarioides, Swartz. A low inconspicuous fern, growing in grassy places and pastures, 3 to 6 inches high. Rather common. 773.

# LYCOPODIACE Æ-Club-Moss Family.

775. LYCOPODIUM lucidulum, Michx. In damp cold woods. Common.

L. Selago, L. Growing among the grass on the rocky heights of Carleton, St. John. 775.

L. inundatum, L. A dwarf little plant, growing in wet sandy places. Rather com-776. mon in Kent.

L. annotinum, L. Creeping along (1-4 feet) over roots and among leaves in dry 777. woods. Common.

L. dendroideum, Michx. Ground Pine Resembles a small tree, 6 to 9 inches high, 878. in rather dry woods. Common

L. clavatum, L. Common Club Moss. An extensively creeping plant in dry woods.

Common. July.

L. complanatum, L. Remarkable for its creeping stems and spreading fan-like 780. branches. Common.

# CHARACEÆ-Chara Family.

781. CHARA fragilis. A peculiar branching little plant, growing on the bottom of ponds and lakes, its stems and branches encased in a brittle crust, emitting a strong and very disagreeable odor when taken from the water. Lakes, St. John County. 782.

NITELLA flexilis, Agardh. A very delicate, much-branching plant growing in still or slightly moving water. Branches in whorls. Bass River.

#### MUSCI-Mosses.

783. SPHAGNUM acutifolium, Ehrhart. Several forms or varieties are found in peat bogs Sphagnum acutifolium, Ehrhart. Several forms or varieties are found and swamps. Common.

S. cuspidatum, Ehrh. Several varieties occur in peat bogs and swamps.

S. cymbifolium, Dill. Peat bogs.

S. fimbriatum, Wilson. Bogs and swamps. Hampton. Kent County.

S. Girgenshonii, Angstr. Peat bog. Kingston, Kent County.

S. molluscum, Bruch. Peat bog. Kingston, Kent County.

S. papillosum, Lindb. Lily Lake, St. John.

S. rigidum, Schimp. Peat bog. Kingston, Kent.

S. rubellum, Wilson. Peat bogs. Kingston, Kent.

S. squarrossum, Pers. Swamps. Common.

S. subsecundum Nees. S. contoutum Schultz. Kingston Kent. 784.

785.

- 786.
- 787. 788.

789.

790. 791.

792.

793. S. subsecundum, Nees. S. contortum, Schultz. Kingston, Kent.

794. S. Wulfianum, Girgens. Kent County.

795. TREMATODON ambiguus, James. Kent County.

796.

DICEANUM cerviculatum. Hedw. On rotten wood, St. John.
D. fuscescens, Turner. D. congestum, Brid. On old logs. Bass River, Kent 797. County. 798.

799.

800. 801.

802.

D. flagellare, Hedw. On decaying logs. St. John.
D. gracilescens, Web. & Mohr. Bass River.
D. heteromallum, Hedw. Moist ground. Common.
D. montanum, Hedw. On trunks of trees. Bass River.
D. polycarpum, Ehrh. The writer collected it at Pictou in 1874.
D. rufescens, Turner. On wet clay. Bass River. Fredericton.
D. Schraderi, Web. & Mohr. Wet woods. Bass River. 803.

804.

805. D. scoparium, L. Different forms or varieties occur. Common. 806.

D. subulatum, Hedw. Kouchibouguac.

807. D. undulatum, Turner. Dry woods, on the ground. Bass River.

D. varium, Hedw. On clay. Truro, N. S. 808.

D. virens, Hedw., var. Wahlenbergii, Bryol. Eur. On fallen trees. Bass River-Ceratodon purpureus, Brid. Abundant everywhere. 809.

810.

811. FISSIDENS osmundioides, Hedw. Rough waters, near Bathurst. 812.

Tristicks commitments, fields. Rough waters, hear bathurst.
F. adiantoides, Hedw. On rocks. St. John.
Trichostomum tortile, Schrad. Growing on clay. Nepisiquit Falls. Kent.
T. lineare, Swartz. T. vaginans, Sulliv. On roadsides, Kent.
Barbula unguiculata, Hedw. On clay. Bass River. 813. 814.

815,

B. cæspitosa, Schwegr. Woods, about the roots of trees. Kent. St. John. • 816.

817. St. John.

B. tortuosa, Web. & Mohr. On rocks. Bass River. B. mucronifolia, Br. & Sch. On rocks, Truro, N. S. 818.

- 819. B. fallax, Hedw. Bass River.
- DIDYMODON rubellus, Br. & Sch. On the ground. Truro, N. S. 820.
- DISTICIIUM capillaceum, Br. & Sch. Tattagouche Falls. 821. TETRAPHIS pellucida, Hedw. On rotten wood. Common. ENCALYPTA ciliata, Hedw. Rocks. Tattagouche Falls. Zygodon Lapponicus, Br. & Sch. Truro, N. S. ORTHOTRICHUM anomalum, Hedw. On rocks, Fredericton. 822. 823.

824.

- 825.
- O. Canadense, Br. & Sch. O. Ohioense, Sulliv. & Lesq. On trees, Kent Co. 826.

O. crispulum. Hornsch. On beech trees, Bass River. 827.

828. O. crispum, Hedw. On trees, Bass River. O. Hutchinsiæ, Smith. On trees, Bass River. 829. 830. O. leiocarpum, Br. & Sch. On trees, Bass River. O. Ludwigii, Schwægr. On trees, Bass River. 831. O. obtusifolium, Schrad. On trees, Bass River. 832.

O. Rogeri, Brid. On trees, Bass River. 833. O. sordidum, Sulliv. On trees, Bass River. 834. O. speciosum, Nees. On trees, Bass River. 835.

836.

O. strangulatum, Beauv. On trees, Bass River. Fredericton. Schistidium apocarpum, Br. & Sch. Common on rocks, St. John Co. 837.

HEDWIGIA ciliata, Ehrh. Common on elms. 838.

DIPHYSCIUM foliosum, Web. & Mohr. On clay soil, Truro, N. S. 839.

ATRICHUM undulatum, Beauv. On the ground, Kent. 840. A. angustatum, Beauv. On the ground, Bass River. 841.

- 842.
- POGONATUM brevicaule, Brid. On clayey soil. Bass River. Carleton. P. alpinum, Brid. On the ground. Truro. Restigouche. Polytrichum commune, L. Damp shady places. Common. 843. 844. P. formosum, Hedw. On the ground. Bass River. 854.

P. juniperinum, Hedw. Dry hills and gravelly knolls. Everywhere. 846.

847.

P. piliferum, Schreb. Gravelly knolls. Kent. AULOCOMNION palustre. Schwegr. Swamps. Bass River. 848.

BRYUM acuminatum, Hoppe & Hornsh. Rocks, Bass River. Restigouche. 849. B. albicans, Wahl. B. Wahlenbergii, Schwægr. Springy places. Windsor. B. argenteum, L. On earth, or stones. Truro, N. S. B. bimum, Schreb. Borders of swamps. Bass River. St. John. 850.

851.

852.

853.

B. cæspiticium, L. On dry grounds. Bass River,
B. cernuum, Hedw. B. pendulum, Hornsch. On rotten wood. Bass River. Carleton.
B. crudum, Schreb. Bass River. 854. 854.

856.

B. elongatum, Dicks. Crevices of rocks. St. John. B. intermedium, Brid. Grand Falls of Nepisiquit. 857. B. Lescurianum, Sulliv. On ground, roadsides. Bass River, 858.

859. B. nutans, Schreb. On rotten wood. Bass River.

860. B. pseudo-triquetrum, Schwægr. Wet rocks. Bass River. B. pyriforme, Hedw. On recently burnt soil. Bass River. 861.

B. roseum, Schreb. Shady woods. Kent Co. 862.

MNIUM affine, Bland. Damp shaded bank of a brook at Bass River. 863.

M. cuspidatum, Hedw. Forms large matted patches among the roots of trees, 864. M. Drummondii, Br. and Sch. In large patches on the ground in shady places.
M. hornum, Hedw. In dense patches in shady woods. Truro. 865.

866.

867. 868.

869.

M. lycopodioides, Br. Eu. In a damp shaded ravine. Bass River.
M. orthorhynchum, Brid. Grand Falls of Nepisiquit
M. medium, Br. and Sch. Damp, shaded ravine. Bass River.
M. punctatum. Hedw. Damp shaded ravine. Bass River.
M. spinulosum, Br. Eu. Damp shaded places. Bass River.
M. stellars Hedw. Morriso of breaks. Cayleton. 870. 871.

M. stellare, Hedw. Margins of brooks. Carleton. 872.

873. BARTRAMIA fontana, Brid. Springy places. Molus River, Kent County.

874.

B. Marchica, Brid. Wet places. Kent County. Carleton.
B. Œderi, Swartz. Rocks at Tattagouche Falls, Gloucester County. 875. 876.

B. pomiformis, Hedw. Rocky places. Bass River. St. John. Funaria hygrometrica, Hedw. On recently burnt ground. Bass River. 877.

Var. calvescens, Sulliv, Same places. Splachnum rubrum, L. Bass River. 878. Sent from St. George by Mr. Vroom.

879.

FONTINALIS antipyretica, L. 1n brooks. Common. F. Dalecarlica, Br. Eur. In brooks, attached to stones. Kent County. 881.

DICHELYMA falcatum, Myrin. In still water. Bass River. 882.

- D. pallescens, Br. Europ. On the base of trees. Fredericton. Bass River. LEUCODON julaceus, Sulliv. On the bark of trees. Kent County. 823
- 884. Anomodon viticulosus, Hook & Tayl. On shaded rocks. St. John. 885.
- 886. A. attenuatus, Hub. On roots of trees. Truro, N. S.
- LESKEA polycarpa, Hedw. On trunks of trees subject to inundation. Bass River. 887. Fredericton.
- 888.
- MYURELLA Careyana, Sulliv. On rocks. St. John. PYLAISÆA intricata, Br. Eur. On trees. Fredericton. P. velutina, W. P. Schimp. On trees. Bass River. 889
- 890
- P. polyantha, Schreb. On trees. Bass River. PTERIGYNANDRUM filiforme, Hedw. Bass River. 891.
- 892
- PLATYGYRIUM repens. Br. Eur. Bass River. 893. 894. NECKERA pennata, Hedw. On trees. Common.
- CLIMACIUM Americanum, Brid. Bass River. 895.
- 896. C. dendroides, Web, and Mohr. On the ground in dense shade. Molus River.
- HYPNUM abietinum, I.. On rocks and ground, Restigouche. H. albicans, Neck. Bass River. 897.
- 898.
- 899.
- H. Bergenense, Austin. Bass River. H. campestre, Br. & Sch. On the ground, Bass River. 900.
- H. cordifolium, Hedw. On wet sandy places, Bass River.
  H. Crista-Castrensis, L. On old logs. Common.
  H. curvifolium, Hedw. Bass River. 901.
- 902.
- 903.
- H. delicatulum, L. Bass River. St. John. 904.
- 905. H. denticulatum, L. Bass River. 906. H. eugyrium, Br. Eu. Bass River.
- 907. H. exannulatum, Gumb. In boggy places, Bass River.
- 908. H. fertile, Sendt. On old logs, Bass River.
- 909. H. fluitans, L. In bogs, Kent Co.
- 910. H. Haldanianum, Grev. On old logs. Common. H. hispidulum, Brid. Bass River.
- 911.
- H. lætum, Brid. Bass River. 912.
- 913.
- H. Muhlenbeckii, Bry. Eur. On old logs, Bass River. St. John. 914.
- 915. H. Novæ-Angliæ, Sulliv. & Lesq. In large patches, Bass River.
- H. ochraceum, Turner. Kent Co. H. orthocladon, Beauv. Kent Co. 916. 917.
- 918. H. pallescens, Schimp. Bass River.
- 919. H. plumosum, L. Bass River.
- 920. H. polymorphum, Br. & Sch. = H. chrysophyllum, Brid.
- 921. H. populeum. Hedw. Bass River.
- 922. H. pulchellum, Dicks. Bass River.
- 923. H. radicale, Brid. Fredericton.
- 924. H. recurvans, Schwægr. Kent Co.
- H. reflexum, Stark. Bass River. H. reptile, Michx. Bass River. 925.
- 926. 927.
- H. riparium, Hedw. On stones in brooks, Molus River. H. rivulare, Bruch. Bass River. 928.
- 929. H. rusciforme, Weis. On rocks, St. John. H. rutabulum, I. Bass River.
- 930.
- 931. H. salebrosum, Hoffm. Bass River.
- H. serrulatum, Hedw. On rotten wood, Bass River.
  H. Schreberi, Willd. In shady woods, Bass River.
  H. serpens, Hedw. On trees, Bass River. 932.
- 933.
- 934.
- H. Sommerfeltii, Myr. Salmon River, Kent Co. H. splendens, Hedw. On old logs. Common. 935.
- 936.
- 937. H. Starkii, Brid. Bass River.
- H. Stramineum, Dicks. Among sphagnum. Bass River.
  H. strigosum, Hoffm. Bass River.
  H. Sullivantii, Spruce. On rocks. Truro, N. S. 938.
- 939.
- 940.
- H. tamariscinum, Hedw. On the ground. Bass River. 941.
- 942.
- 943.
- 944.
- H. triquetrum, L. On the ground about roots of trees. Bass River.
  H. turfaceum, Lind. On stumps. Bass River.
  H. umbratum, Ehrh. Large patches in shady woods. Bass River.
  H. uncinatum, Hedw. On the ground. Bass River. 945. 946. H. velutinum, L. On decayed wood. Bass River.

#### HEPATICÆ-Liverworts

- 947. MARCHANTIA polymorpha, L. Common on recently burnt ground. PREISSIA commutata, Nees. Bass River.
- 948.
- FEGATELLA conica, Corda. Conocephalus conicus, Dum. Great Liverwort. Springy 949. places. (ommon.
- 950. Pellia epiphylla, Nees. Damp, shady places. Common.
- CHILOSCYPHUS pólyanthos, Corda. Rocks. Grand Falls of Nepisiquit.\* LOPHOCOLEA heterophylla, Nees. Old logs. Bass River. 951.
- 952.
- 953.
- LIOCHLENA lancolata, Nees. Old bogs. Bass River.
  Sphagnecetis Hubeneriana, Rabenh. On rotten wood. Bass River. 954.
- 953. JUNGERMANNIA catenulata, Huben. On rotten wood. Bass River.
- 956. J. crenulata, Smith.
- J. divaricata, Eng. Bot. Among mosses. Truro. J. inflata, Huds. Sphagnous bog. Richibucto. 957.
- 958.
- 959. J. lycopodioides, Aust.
- 960. J. minuta, Crantz. St. John.
- 961.
- J. obtusifolia, Hook. On the ground. Truro, N.S. J. spherocarpa Hook. Among mosses. Kouchibouguac. 962.
- 963. J. Wilsoni, Hook. Among mosses.
- 964. J. ventricosa, Dicks. On rotten wood. St. John. 965. SCAPANIA nemorosa, Nees. On wet banks, Bass River. St. John.
- Plagiochila asplenioides, Nees & Montague. Bass River. 966.
- 967. P. porelloides, Lind. Among mosses. Bass River. St. John.
- 968. FRULLANIA Grayana, Montague. On trees. Common.
- F. Eboracensis, Lehm. On bark of trees Common. 969.
- 970. MADOTHECA platyphylla. Dumort. Common on trees.
- 971. PTILIDIUM ciliare, Nees. Rotten logs in woods.
- 972. TRICHOCOLEA Tomentella, Nees. In large patches on damp ground.
- 973. MASTIGOBRYUM trilobatum, Nees. On damp ground.
- 974. LEPIDOZIA reptans, Nees. On the ground. Bass River.

#### LICHENES-Lichens.

- 975. RAMALINA calacaris, Fries, var. fraxinea. On trees.
- 976. CETRARIA lacunosa, Ach. var. Atlantica, Tuck. On trees.
- 977. Usnea barbata, Fries, var. dasypoga, Fr. Common on trees.
- 978. ALECTORIA jubata, Ach. On old rails.
- 979. THELOSCHISTES parietinus, Norm. Common on trees and rocks.
- PARMELIA olivacea, Ach. On trees Bass River. 980.
- 981. P. physodes, Ach. On trees. Bass River.
- 982. P. saxatilis, L. On stones.
- 983.
- 984.
- P. perlata, Ach.
  P. Borreri, Turn. On trees.
  Physcia stellaris, Wahl. On trees. Common. 985.
- 986. STICTA glomerulifera, Delise. Trunks of trees.
- 987.
- 988.
- S. pulmonaria, L. Common on Maple trees.

  Peltigera canina, L. On the ground. Bass River.

  P. aphthosa, Hoffm. On the ground. Bass River. 989.
- 990. P. polydactyla, Hoffm. On the ground. Bass River.
- 991. LECANORA pallida, Schaer. Bark of trees. Bass River.
- L. pallescens, Fries. Bark of trees. Bass River. 992.
- L. subfusca, Ach. Common. 993.
- Pertusaria leioplaca. On bark. Bass River. 994.
- P. communis, DC. On bark. Bass River. P. velata, Nyl. Bark of trees. Bass River. 995.
- 996.
- 997. STEREOCAULON tomentosum, Fr. On stones.
- Cladonia cornuta, Fr. On the ground. Kennebeccasis. 998. C. gracilis, Fries, var. hybrida. Old stumps. Bass River. 999.
- C. deformis, Hoffm. On the ground. Richibucto. 1000.
- C. furcata, Fries. St. John Bass River. 1001.
- 1002.
- C. cristatella, Tuck. Old Stumps. Bass River.
  C. rangiferina, L. Reindeer Moss. On the ground. Common.
  C. pyxidata, Fries. Fredericton. Bass River. 1003.
- 1004.
- BEOMYCES æruginosus, DC. = Biatora ic madophila, Fries. 1005.
- B. roseus, Pers. On the ground, Bass River. Biatora rubella, Ehrh. Bass River. 1006.
- 1007.

B. vernalis, Fries. Trees, Bass River.
BUELLIA parasema, Koerb. On bark of beech, Bass River.
OPEGRAPHA varia, Fries. Bark of maples, Bass River.
GRAPHIS simplex, Ach. Bark of maples, Bass River. 1009. 1010.

1011.

SPILEROPHORUS coralloides, Pers. — S. globiferus, L. Bass River. Calicium Curtissii, Tuck. On Sumach, Bass River. 1012.

1013.

1014. C. subtile, Fr. Bass River.

#### FUNGI.

- AGARICUS prunulus, Scop. In woods. An edible mushroom. Bass River. 1015.
- 1016. A. melleus, Vahl. In woods on the ground and on stumps. A. muscarius, Fries. On the ground in woods. Bass River. 1017.

1018. A. Campanella, Batsch. On old logs. Bass River.

- CANTHARELLUS crispus, Fries. Old logs and sticks. Bass River. 1019.
- 1020. Panus stypticus, Fries. On decaying wood. Bass River.
- 1021. Schizophyllum commune, Fries. Dead wood. Common. 1022. LENZITES sepiaria, Fries. Old logs and rails. Bass River. Polyporus scutellatus, Schw. On dead wood. Bass River. 1023:
- 1024. P. cinnabarinus, Fries. A beautiful red species on old logs.
- 1025. P. hirsutus, Fries. Trees and stumps. P. versicolor, Fries. Old logs and sticks.
  P. abietinus, Fries. Bark of hemlocks.
  P. elongatus, Fries. Decaying trunks.
  P. ferruginosus, Schrad. Old wood. 1026. 1027. 1028.
- 1029.
- P. nigropurpurascens, Schw. Old wood. DEDALEA confragosa, Bolt. Old logs and stumps. 1031.
- 1032. D. unicolor, Fries. Old trunks of trees. 1033.
- IRPEX tulipiferæ, Schw. On dead wood. STEREUM rugosum, Fries. On decaying trunks. S. rubiginosum, Schrad. On old trunks. 1034.

1035.

1036. TREMELLA mesenterica, Retz. On bark of trees.

1037. T. foliacea, Pers. On old wood.

- 1038.
- DACRYMACES stillatus, Fries. Old wood. EXIDIA auricula-Judæ, Fries. On old damp logs. E. glandulosa, Fries. Bark of decaying alders. 1040. 1041. 1042. LYCOPERDON giganteum, Batsch. Puff-ball. Common.
- 1043. L. pyriforme, Schooff. On ground and old stumps. 1044. LYCOGALA epidendrum, L. Rotten wood, Bass River.
- UROMYCES Limonii, Lev. On leaves of Statice. Ustilago segetum, Pers. Heads of oats. 1045.

1046.

1047. U. urceolorum, DC. On Carex Pennsylvanica, Richibucto.

1048. Peziza scutellata, L. Old wood.

1049. 'P. vulcanalis, Peck. On burnt ground. P. furfuracea, Fries. On decaying trunks. Cenangium pinastri, Fries. Bark of spruce. Hysterium pulicare, Fries. On maple bark. 1050. 1051. 1052.

1053.

XYLARIA digitata, Grev. On rotten wood. HYPOCREA Richardsonii, B. & M. On bark of decaying trees. 1054.

Hypoxylon coherens, Pers. Old bogs. Bass River. 1055. H. fuscum, Pers. Dead branches. Bass River. 1056.

1057. H. fragiforme, Pers. On bark of old trees. Bass River.

1058. H. concentricum, Grev. On old stumps.

1060. NECTRIA cinnabarini, Fries. On dead Southernwood. Bass River.

1061. SPHERIA ulmea, Schw. Leaves of elms.

- S. morbosa, Schw. "Black-knot" of Plum trees. 1062.
- DOTHIDEA Trifolii, Fries. Leaves of clover. Bass River. 1063.

1064. D. graminis, Fries. Leaves of grasses.

1065. ERINEUM roseum, Pers. Leaves of yellow birch. 1066.

E. fagineum, Pers. Beech leaves.
E. luteolum, Kunze. Maple leaves.
PLICATURA alni, Peck. On bark of alders. 1067. 1068.

1069. ERGOTÆTIA abortifaciens, Quekett. Ergot. Frequent on grasses.

